



CITY OF DUNDEE

REPORT

OF THE


MEDICAL OFFICER OF HEALTH

FOR THE

YEAR ENDING 31ST DECEMBER, 1936

DUNDEE :

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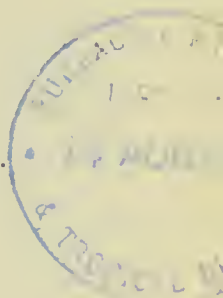
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*Public Health Department,
Dundee, June, 1937.*

The Lord Provost, Magistrates and
Town Councillors of the City of Dundee.



Madam and Gentlemen,

I have the honour to submit the Annual Report of the Public Health Department for the year 1936.

News has just been received of the death of Dr W. Tuach Mackenzie, who, on 15th June, retired from the post of Medical Superintendent of Dundee Mental Hospital. He had held this post for 34 years. In May, 1930, he became an official of this Department on his Institution being transferred from the District Board of Control to the Corporation. During the seven years we worked together I found Dr Tuach Mackenzie to be a most willing and pleasant colleague. He worked under circumstances which must very often have been difficult for him, but he never complained. I had hoped that he would have had a happy and peaceful retirement after his many years' service.

The opportunity is taken to thank all my colleagues in the Department and all members of the staff for their loyal co-operation and assistance throughout the year.

I am, Madam and Gentlemen,

Your obedient servant,

W. R. Burgess.

Medical Officer of Health.

Summary of Vital Statistics.

The following is a summary of the principal statistics for the years 1934, 1935 and 1936 :—

				1934.	1935.	1936.
Population	...	...	...	177,230	178,157	178,692
Number of Deaths (corrected)		...	...	2,417	2,346	2,526
Death-rate per 1,000 Population (corrected)	...		...	13·6	13·2	14·1
Deaths of Infants under 1 year		...	...	246	218	256
Infantile Death-rate per 1,000 Births			...	74	68	81
Marriage-rate per 1,000 Population	...		...	8·7	8·9	8·2
Number of Births registered (corrected)			...	3,310	3,195	3,171
Birth-rate per 1,000 Population	...		...	18·7	17·9	17·7
Illegitimate Birth-rate per 100 Births			...	8·2	7·5	6·7
Number of Deaths from Pulmonary Tuberculosis				95	119	107
Death-rate per 1,000 from Pulmonary Tuberculosis				·54	·67	·60
Death-rate from all forms of Tuberculosis	...			·80	·89	·82
Death-rate from the Principal Epidemic Diseases				·72	·40	·57
Deaths from Enteric Fever	...	...	...	2	0	0

Annual Report—1936

Although the death-rates for the year 1936 as shown in the summary on the previous page are a little higher than those for the year 1935, they can be considered as fairly satisfactory. The incidence of epidemic-infectious diseases was rather higher last year than in the previous year. To some extent, this increase is responsible for the rise in certain of the figures.

The corrected death-rate from all causes and at all ages was 14.1 per 1,000 population. The number of deaths was 2,526. The corresponding figures for the year 1935 were 13.2 per 1,000 with 2,346 deaths. This increase in the general death-rate cannot be attributed to any particular disease or group of diseases. All age periods shared in the rise, except between the ages of 25 and 45. The general death-rate for the whole of Scotland was 13.4, and for the large burghs taken together 13.8 per 1,000, so that by comparison, the Dundee figures show in an unfavourable light.

The infantile mortality rate was 81 per 1,000 births compared with 68 in 1935 and 74 in 1934. The rate for the whole of Scotland was 82 per 1,000 births, and for the large burghs taken together 93 per 1,000. The Dundee rate therefore compares very favourably with that for the whole of Scotland. The increase in the Dundee figure last year compared with the previous year is, however, very unfortunate. It appears to have been entirely due to an outbreak of pneumonia which occurred during the months of January and February of that year. The total notifications of primary pneumonia at all ages for the year 1936 was 681. Of that total, 368 were made in January and February (266, January; 102, February). The highest number for any other month was 42 in December. In 1935, the total number of notifications of primary pneumonia was 417, the highest month being February with 59.

The primary pneumonia epidemic in January and February, 1936, was essentially a children's epidemic. Of the 681 notifications, 427 were of children under five years of age—191 at ages under 1 year, and 236 at ages from 1 to 5 years.

In 1935 there were 218, and in 1936 there were 256 infant deaths, an increase of 38. With the exception of primary pneumonia the cause distribution of these deaths was practically the same in the two years. In both, measles and whooping cough together were certified causes of 10 infant deaths, while diarrhoea was responsible for 15 in 1936 and 15 in 1935. On the other hand, primary pneumonia caused 68 infant deaths in 1936 and 35 in 1935, a rise of 33, which almost equals the increase for all causes for the year. At ages under three months, the increase from all causes was 33, and for primary pneumonia 27. Between 3 and 12 months, the increase for all causes was 5, and for primary pneumonia 6.

The influence of primary pneumonia on infantile mortality during the year 1936 is shown in the following monthly table:—

Month	Notification of Primary Pneumonia—All-Ages	Infant Deaths Certified as Due to Primary Pneumonia	Infantile Mortality
January,	266	26	190
February,	102	14	120
March,	33	7	81
April,	25	3	74
May,	34	5	72
June,	25	1	59
July,	23	1	41
August,	21	1	57
September,	37	2	69
October,	33	2	66
November,	40	1	47
December,	42	5	102

The details of the causes of infantile deaths are contained in Table XII. of the Statistical Section of this report.

The death-rate from all forms of tuberculosis fell from .89 per 1,000 population in 1935 to .82 per 1,000 population in 1936. As the death-rate from pulmonary tuberculosis declined from .67 to .60 per 1,000, the death-rate from the non-pulmonary form remained the same, namely, .22 per 1,000. The tuberculosis (all forms) death-rate in the whole of Scotland for 1936 was .74 per 1,000, and in the large burghs taken together .90.

There were 333 deaths certified in the city as due to malignant disease, giving a rate of 18.63 per 1,000. In 1935, the corresponding figures were 305 and 17.12. Although this rate is tending

to increase, the 1936 figure was exceeded in 1928, 1930 and 1934. While the changing age distribution of the population, and better diagnosis may to some extent explain the tendency for the malignant diseases to bulk more largely in the death returns, they are probably not entirely responsible. The knowledge of malignant disease is steadily increasing, but it cannot be said that it is within reach of being kept under control.

The maternal mortality rose from 5.63 per 1,000 live births in 1935 to 6.94 in 1936.

The death-rate from the principal epidemic diseases was .57 per 1,000. The corresponding rate in 1935 was .40 per 1,000.

The birth-rate fell from 17.9 in 1935 to 17.7 per 1,000 population last year.

The medical services have been referred to at considerable length in recent Annual Reports. They are developing slowly in accordance with the policy of the Public Health Committee, and every effort is being made to co-ordinate the services which are under the control of that Committee in order to prevent overlapping and to avoid confusion in the public mind. The National Health Insurance scheme still remains apart from the Local Authority service, and must remain so while it is in charge of an *ad hoc* local authority. Perhaps the most important defect in the system at present in operation is that the provision for domiciliary medical attention to children is inadequate. This must be the case until a scheme for providing such a service has been worked out, preferably by the extension of the National Health Insurance Acts. Meantime it is exceedingly difficult for the various clinics to carry out their real functions efficiently.

In developing the medical services, effect is given to the decision of the Corporation to co-operate with the University Court of the University of St Andrews. Medical students are encouraged to attend the hospitals and clinics in order to acquire the experience necessary as the future guardians of the public health.

In the following notes each service is referred to separately, but in their administration they are fitted into one another so far as possible to form one service by using the same buildings, the same equipment, and the same staff.

In the last Annual Report reference was made to the survey of the Maternity Services in Dundee which was made early in the year 1936, and reported on in May of this year. This survey has received full consideration by the Public Health Committee, and it has been decided to build at Maryfield Hospital an ante-natal unit for both in-patients and out-patients. This new unit, along with the maternity unit, which is now nearing completion, will enable Maryfield Hospital to undertake a very much greater number of maternity cases, both in the pre-natal and natal stages. The Public Health Committee have also agreed that the ante-natal clinic now conducted at Polepark Day Nursery will in future be in charge of a specialist obstetrician. A post-natal clinic is also to be established, probably at 1 Nelson Street, although it may be agreed to transfer this clinic to Maryfield Hospital. These arrangements were made after consultation with the Directors of the Royal Infirmary, with whom it is essential to co-operate in a service in which they have a special interest.

In the special report dealing with the survey, it was recommended that no action should be taken by the Corporation regarding the general medical practitioner-midwife service until the new Act dealing with Maternity Services in Scotland had been passed. This was agreed to. The Maternity Services (Scotland) Act, 1937 came into operation on 15th May of this year, and it is now necessary to consider the proposals which must be submitted to the Department of Health for Scotland with a view to establishing in the city a domiciliary midwifery service. These proposals will no doubt be dealt with in a special report which must be fairly comprehensive in nature and although dealing particularly with domiciliary service must also consider the question of hospital provision in order to ensure that the scheme is complete and in every respect adequate to meet the needs of the community.

There is very little calling for special note in regard to infant welfare work. It is essential that this service should work in with the maternity services on the one hand and with the pre-school and school medical services on the other. Apart from residential hospitals, most of the work is done in the homes of the infants by health visitors and in the clinics by doctors and health visitors. So far as possible, the work at the clinics is limited to the education of mothers, consultation and diagnosis. A certain amount of treatment has to be carried out, but this is limited so far as possible to the kind of treatment that cannot easily be given elsewhere. If the treatment required cannot be given at the clinics,

responsibility is accepted for ensuring that the appropriate treatment is made available.

The Public Health Committee have had under consideration the need for new premises to take the place of the clinic at the Corporation Baths in Caldron Street. It was thought that the old school in Harcourt Street might be adapted for use as a clinic, but after careful consideration the Public Health Committee decided to abandon this idea in favour of the proposal to erect a new building in the south-east corner of the grounds of King's Cross Hospital. The City Architect has received instructions to submit a plan of suitable premises. He is now engaged on this work.

Pre-School children do not receive adequate medical attention, although every effort is made to supervise them in their own homes and at the clinics. It is rather difficult to establish contact with the pre-school child. He does not attend school, and therefore does not come within the system of medical inspection in operation there. The parents are not yet accustomed to the idea of bringing their children to clinics. In any case, the resources of these clinics are not sufficient to deal with this age-group in large numbers. The health visitors in visiting the homes do their utmost to advise the mothers in regard to the welfare of children who have passed the infant stage, but who are not yet old enough to attend school. These pre-school children who are in attendance at day nurseries are well looked after, and the scheme agreed to by the Education Committee of the Corporation which has for its object the extension of the system of nursery schools and nursery classes seems to provide the only satisfactory method of supervising the under-five child. The day nursery school and nursery classes provide the school medical officers with the opportunity of establishing contact with the child before it enters school.

The report of the Deputy Medical Officer of Health (Pre-School and School Medical Services) is contained in this volume. It applies to the school year and not to the calendar year. The question of the school dental services was under consideration by the Public Health Committee, and a new dentist and an additional health visitor took up duty early in the present year. There are now two whole-time dentists engaged in school dental work and one part-time dentist engaged in maternity services and infant welfare work. It is proposed to have a dental room in the north district clinic to be erected in the grounds of King's Cross Hospital. When that building is available, another dentist will fall to be appointed.

Dr Kidd retires in August of this year. He has been engaged in looking after the health of school children since the inception of the school medical services scheme in this country. I think it may be said that no one in Scotland has more experience and more understanding of the aims and objects of the particular service in which he has been engaged. His success is not only based on skill and experience, but also on enthusiasm and understanding of the outlook of children. He knew how to handle them and got the best out of them. A man of many interests, he is not likely to be idle although he is giving up official work, and I have no doubt that his advice and help will always be available to the Department when required.

Child Guidance
Clinic.

Perhaps this is the most suitable place to welcome the establishment at the Training College of a Child Guidance Clinic for the city. This is essentially an educational movement, but it has undoubtedly a medical implication. The Director of Education submitted an excellent report on the subject in March of this year, and reference to his report is recommended to anyone who is interested in the movement.

The general aim and purpose of a Child Guidance Clinic is set forth in a brochure on the subject issued by the Child Guidance Council:—

“ Such a Clinic is an attempt to bring together the various resources of the community on behalf of children who are in distress because of unsatisfied inner needs or who are at war with their surroundings. Such children often show peculiar character traits, undesirable behaviour and a general inability to fulfil the demands made upon them either at home or at school.

“ The essence of child guidance is that behaviour is studied as nearly as possible without prejudice, in the hope of discovering the causes which produce the difficulty. An effort is then made to eradicate or to abate these causes rather than to control the behaviour by precept or by the imposition of authority.

“ A clinic should, through its services to selected children, interest doctors, teachers, social workers and parents in the value of this objective approach to the problems of child behaviour—and should in this way contribute to the prevention of many personality and behaviour disorders, and to a consideration of the needs of groups of children which are not met at present.

“ Child Guidance is carried out by a group of specialists, who work closely together, realising that success must depend upon winning the confidence and active help of the families concerned, who can then be guided in solving their own problem.

“ Only this plan of ‘ helping people to help themselves ’ will produce definite and lasting results. Such treatment means that much time must be spent by the workers upon each case, but every one of experience knows that the mere giving of advice, however expert, is not enough to solve difficulties. Careful and patient work is required to enable people to alter, both inwardly and outwardly, their attitudes and behaviour.”

The following paragraphs represent the principal contents of a special report which was issued by me on the need for special facilities for the treatment of squint. The recommendations contained in this report have been agreed to, and the Orthoptic Training Centre will probably be established sometime during the present year.

The Deputy Medical Officer of Health (Pre-School and School Medical Services) and the Consulting Ophthalmologist, School Medical Services, have recently been considering the possibility of providing more complete treatment facilities for school children and pre-school children discovered at clinics and in the course of routine inspection to be suffering from squint.

The correction of squint in a child is highly important, as such a condition interferes seriously with efficiency, the child being handicapped not only during school years, but during later life. In many cases of squint the vision in the squinting eye becomes so defective that the eye has to be classified as a blind one. Not only this, the child loses the power of stereoscopic vision, that is, the ability to judge depth, and is thus heavily handicapped in wage-earning capacity.

The Deputy Medical Officer of Health (Pre-School and School Medical Services) when making his report to the Ministry of Labour on a prospective candidate for juvenile employment, has frequently to recommend in cases of squint that the candidate should not enter an occupation involving eyestrain or requiring manipulative skill. Admission to many of the public services is necessarily debarred to numbers of candidates who have defective vision in one eye owing to an old squint.

The condition may be said to be fairly common. According to this report, some 3% of school children examined each year are found to have a squint. In the school year ending 31st July, 1936, of 9,701 school boys and girls examined 367, or 4%, were found to suffer from squint. In the year ending July, 1935, 289 cases, or 3%, were discovered. The figures in other places, e.g., Edinburgh and Aberdeen, are substantially the same. (In a recent year the percentage for Edinburgh was 2.8 and for Aberdeen 3.4). If we accept 3% for Dundee it means there are at the moment in the school population of about 28,000, 840 cases of squint.

In recent years there have been very definite improvements in the methods of treating squint, and it is now realised that the condition is amenable to early treatment. It is possible by the use of special instruments, in charge of a trained worker, to educate the muscles of the eyes of squinting children so that there will be brought about in many cases the blending of the two sets of visual impressions. Stereoscopic vision is thereby restored, and any defective vision in the squinting eye prevented or corrected.

Briefly, the requirements for such an Orthoptic Training Centre are as follows:—

At least two rooms are required. One of these must have a minimum length of twenty feet. Suitable rooms can be made available at the Public Health Institute for an expenditure of possibly £25 plus an annual sum representing rent, heating, lighting and cleaning. This sum need not be large, and is necessary for accounting purposes only, as the premises belong to the Public Health Department.

Two additional members of staff will be required. An Orthoptic Trainer and an assistant for clerical work, etc.

The Orthoptic Trainer must be fully qualified, having undergone a course of training and passed an examination at a centre recognised by the Orthoptic Council of Great Britain. The commencing salary would be £225, rising to possibly £275 or £300 per annum.

The assistant is required for Clerical work, to look after the apparatus and to help generally. Probably a salary of £75 per annum would be sufficient for the assistant who would not be a member of the clerical staff of the Corporation.

A set of instruments costing approximately £100 would have to be purchased. The most expensive instrument is the synoptophore which costs about £45.

During the first year the expenditure would be about £450, which would be reduced in subsequent years by £125 representing non-recurring capital expenditure. The annual cost after the first year would therefore be in the neighbourhood of £325 plus any annual increments granted to the trainer and plus also a sum of say £20 to cover the cost of repairing and replacing instruments and appliances.

Against the annual expenditure there may be a small annual income, impossible to estimate, from fees paid by patients.

As the centre would be open to both pre-school and school children, the cost of establishing and maintaining it would be shared by the Public Health and Education Departments in the proportion of possibly 20% to the former and 80% to the latter.

While an Orthoptic Training Centre in the Public Health Institute would be intended primarily for pre-school and school children, it is important that it should be open to children attending the Eye Department of the Royal Infirmary and the Eye Institution, Nethergate. It is important also that the Orthoptic Centre should be open to private patients on payment of the full cost of training, provided the Orthoptic Trainer has time to take charge of these cases. Any fees received, will of course be payable to the Corporation and not to the Trainer, who will receive an inclusive salary.

The Clinic would be in charge of the Deputy Medical Officer of Health (Pre-School and School Medical Services) and his staff. The various ophthalmic surgeons in the city would have access to it on an equal basis in the interests of their own patients.

It is suggested that after consideration by the Public Health Committee, a copy of this report should be sent to the Directors of the Royal Infirmary, Directors of the Eye Institution and to each of the Ophthalmic Surgeons in special practice in the city for their observations, on receipt of which, the whole question could be referred to the Joint Sub-Committee of the Public Health Committee and Education Committee.

The only domiciliary medical service which falls to be performed by this Department is the provision of medical attendance on the out-door poor. This service was under consideration by the Public Health Committee, and a decision was reached to increase the number of part-time medical officers engaged in this work from five to seven. The two additional medical officers took

up duty early this year. The demands made fully justify the additional appointments, and the policy of employing general medical practitioners for the work has been in my view rightly continued. In 1936, there were 1,914 applications for medical relief made by 1,640 males and 274 females on behalf of themselves or their families. These applicants had wives in 1,511 cases and 5,162 dependant children.

Tuberculosis Services.

The matter which requires to be emphasised regarding the tuberculosis services is the need for extensions at Ashludie Sanatorium. This matter was dealt with in last year's Annual Report, and the suggestion was made that the Corporation of Dundee might consult with Angus County Council with the idea of combining the two areas to form a regional scheme so far as the provision of sanatorium treatment is concerned. The position is unchanged. Indeed, one might say it has become aggravated, and reference should be made to the comments contained in the annual reports of Dr Hunter, Chief Tuberculosis Medical Officer, and Dr Walker, the Senior Resident Medical Officer at Ashludie Sanatorium.

Dr Walker points out that of 99 cases admitted for the first time, 21 were suitable for active treatment directed against the local lesion, 35 were not requiring such treatment, and 43 were unsuitable on account of the type or extent of the lung disease. He explains that although this represents an improvement on last year's figures, maximal efficiency will result only when new cases can be brought under treatment immediately they are discovered. A few weeks spent awaiting admission may decide whether a patient can be successfully treated or not. He emphasises that the ideal of immediate admission cannot be attained with the existing number of beds.

Dr Hunter directs attention to the fact that the accommodation available at Ashludie is based on the needs of patients suffering from pulmonary tuberculosis, the provision being adequate for that purpose alone. There is, however, an ever-increasing demand for accommodation for non-pulmonary types of the disease. Unfortunately the non-pulmonary case requires a prolonged period of treatment. It may be from eighteen months to three years, and beds so occupied are therefore unavailable for other cases. There is therefore a waiting period before urgent cases can be admitted.

Dr Hunter also emphasises the need for accommodation for the treatment of children at ages under five.

A new unit with approximately 40 beds is required at Ashludie to serve the City of Dundee alone. This involves not only the erection of a pavilion but the extension of staff accommodation and the enlarging of the laundry facilities.

It is suggested that the Committee should give early consideration to this matter.

A reference was made in last year's Annual Report to a beginning having been made to the giving of special consideration to the housing of families in which there is a tuberculous element. It was stated that the City Factor kept a special list of such families in order that they may be given particular consideration in the allocation of houses. Unfortunately the arrangement has not worked out according to plan, and it would appear that we will have to wait until sufficient houses have been erected under the Housing (Scotland) Act, 1935, to deal with overcrowding. This is unfortunate. Overcrowding in itself is a serious matter to the health of the family concerned, but it becomes more than ever serious if there exists in it a focus of tuberculosis.

Dr Gilbert Walker left the service of this Department in January of this year. His going is a great loss to the Department. He came to us with special experience in sanatorium treatment of all forms of tuberculosis, and he used that experience for the benefit of the numerous patients who came under his charge at Ashludie Sanatorium. The high standard of treatment carried out at that Institution is largely due to the enthusiasm and skill of Dr Walker.

Details of the work done during the year 1936 are contained in the report by Dr Keay, the Special Medical Officer, which is included in this volume. I think it may be said that the facilities required to meet the needs of the community have been provided. The only doubtful point is whether the public are using them as they ought to be used. Dr Keay gives some encouragement in his report when he explains that the changing attitude of the public to venereal disease may be reflected in the fact that the increase in the number of new cases is more than counterbalanced by the increase in the number of patients who were found not to be suffering from venereal disease, but, who, having exposed themselves to risk of infection, reported for re-assurance or prophylactic treatment. Further, Dr Keay directs attention to the fact that the majority of the patients are reporting at an earlier stage of the disease and that there is a well marked increase in total atten-

Venereal
Diseases

dances. These assurances provide evidence that better use is being made of the facilities provided for the treatment of venereal diseases. Unlike other infectious diseases, the provision of treatment free of charge to persons suffering or thought to be suffering is the only adequate preventive measure. It only serves as a preventive measure however if the treatment is applied early and continued until certified cured. It would appear that male patients realise this better than the female patients, who are not so consistent in their attendances.

Apart from recording the actual work performed during the year, Dr Keay submits some very interesting observations on gonorrhoea and syphilis. His notes on congenital syphilis should be carefully studied. They deal with matters which are the concern of the community generally, and serve as an illustration of the need for thorough co-operation between the various sections, which together make up the Public Health Department. We are about to introduce a very comprehensive Maternity Services scheme, and a place must be found in it for preventing the congenital venereal infections with which Dr Keay deals so effectively in his report.

The mental health services under the control of the Corporation consist of Dundee Mental Hospital, the Mental Wards in the East House, and the Observation Wards, Maryfield Hospital. The second of these services is under the control of the Public Assistance Committee. The other two form part of this Department.

The needs of Dundee Mental Hospital have engaged the attention of the Public Health Committee continuously throughout the year, and many major and minor improvements have been carried out or agreed to. A new shelter for visitors was erected just inside the main entrance and a new kitchen was opened in October. Two new huts, each containing 20 bedrooms, have been completed for the accommodation of resident nursing staff. These two huts, which, although designated temporary, are of sound construction, are now in use—one by women nurses and the other by men nurses. Certain of the rooms formerly occupied by these transferred members of the staff are now occupied by patients, thereby to some extent relieving the state of overcrowding which has prevailed in the Institution for some considerable time. To relieve overcrowding still further, it has been resolved to erect a hospital unit with 60 beds, and the City Architect has been instructed to prepare plans as soon as possible. This extension is urgently

required, and it seems necessary that the whole question of the accommodation of the patients within the Institution must be thoroughly gone into. This applies not only to hospital and dormitory accommodation but also to the recreational facilities. One cannot but feel in going through the various rooms that something more might be done to occupy the minds of the patients. One thinks of reading-rooms, library, games, physical exercises, etc. The question of extensions also raises in one's mind the advisability of enlarging the Hospital at Westgreen sufficiently to accommodate the mental patients now housed in the East House. These improvements must of course be spread over a period of years, but a comprehensive scheme should be worked out at an early date.

The re-equipment of the laundry, long overdue, is under consideration and has formed the subject of reports by Mr Barry Cuthill, Baths Superintendent and Mr McLellan Brown, Depute City Architect.

The farms at Westgreen are also receiving considerable attention by the Committee. Electric lighting is to be installed in the steading, and five of the cottages are to be reconstructed, one being demolished and replaced by a new one. A new farm manager Mr James Boyd, took up duty in April of this year.

Dr Tuach Mackenzie has each year prepared a very full and very interesting report on the Hospital under his charge. Unfortunately owing to illness this year, he has been unable to make his report as complete as usual. The figures contained in it, however, are very informative.

The Observation Mental Wards at Maryfield Hospital were set aside for the treatment of early cases of mental disease by the Dundee Parish Council many years ago. In doing so, the Parish Council were well ahead of the times. It was an effort to treat early and recoverable cases of mental disease in order to prevent them reaching the stage when certification necessitated their removal to a mental hospital. For cases of this sort, undoubtedly a general hospital is the proper place. Mental patients of this type will not willingly go to a mental hospital, but are prepared to go to an institution like Maryfield Hospital which is free from the supposed stigma of the mental hospital.

While the observation mental wards may have to admit from time to time advanced cases of mental disorder, it should deal

more particularly with the milder type of mental disease, especially with those people who are said to suffer from "nervous breakdown." It would seem that this type of ailment is definitely on the increase. As stated by Earl Baldwin, when Prime Minister, the prevention of this form of mental disorder is largely an economic and industrial matter, but action must be taken by health authorities to deal timeously with the increasing number of cases. It has been stated that something like one third of those receiving sick pay under the National Health Insurance Acts are suffering from minor forms of mental trouble and it may be accepted that it is one of the main causes of sick leave in this country. The Observation Wards at Maryfield Hospital have proved exceedingly useful, but there seems to be a tendency on the part of medical practitioners and of the public to use them for the preliminary observation of patients who should have gone direct to the mental hospital instead of for the treatment of early and recoverable cases. There is a certain reluctance in sending a patient direct to Westgreen, and many patients are sent first of all to Maryfield in the hope that a transfer may not be necessary.

It is doubtful if we are getting in touch sufficiently early with a large number of patients who require psychiatric treatment, and it seems desirable that the Public Health Committee should consider the advisability of providing at Maryfield Hospital an out-patient psychiatric clinic and of increasing and improving their in-door accommodation for the treatment of early mental disease. In framing the conditions of appointment of the new Medical Superintendent at the Mental Hospital, the Public Health Committee gave him certain responsibilities outwith the Institution of which he will be Superintendent. When he has become established in this new post, the Committee may think it advisable to instruct him to submit reports on (a) hospital dormitory and recreational accommodation at Westgreen, and (b) the provision at Maryfield Hospital of an indoor and outdoor psychiatric clinic.

The reconstruction and extensions at Maryfield Hospital are progressing slowly. The first section of the new nurses' home is almost completed, while the reconstruction of the north pavilion should be finished in time to permit of it being put into commission before the winter commences. Unfortunately the difficulty in obtaining labour and materials has delayed the completion of these works, and the Hospital has been carried on under very great difficulty owing to reduced accommodation for patients and wholly insufficient accommodation for staff.

In May of this year, the Corporation finally approved of a comprehensive scheme of alterations and extensions. These are to be proceeded with at once, but must take some considerable time to complete. They include the completion of the nurses' home, the first section of which will be ready for occupation shortly. It will have accommodation for 144 nurses, and will include a large recreation hall. The plans relating to the main Hospital block show extensive alterations and provide for a complete new operating theatre suite, new corridor on the first floor, two bed lifts accessible from all the wards, provision of doctors' offices, linen rooms, etc., gutting and refitting ward kitchens, gutting and reconditioning sanitary annexes, new balconies at end of south wings, installation of central heating throughout, reconstruction of roadways, and construction of a parking place for cars at the main entrance. The extensions also include the erection of an ante-natal unit with room for 18 indoor patients, and comprising an out-patient section. This unit forms part of the Maternity Services scheme already referred to in this report.

The question of laundry facilities is still outstanding.

It is expected that it will be possible to increase the number of resident medical officers from two to four immediately the first section of the nurses' home is ready for use. This is in accordance with the instructions of the Corporation.

The Hospital is being increasingly used for the teaching of medical students. In this matter the University of St Andrews and the Public Health Committee are working in friendly co-operation.

The details of the work done at Maryfield Hospital are contained in the excellent report by Dr Macdonald, the Medical Officer, which is included in this volume.

There is nothing of special importance to record in regard to this Institution. The City Architect is in course of preparing a complete scheme for the erection of a new pavilion of the cubicle type with an operating theatre. The scheme must include a new nurses' home, and involves the reconstruction of the heating system.

King & Cross
Hospital.

Dr Davidson reports fully on the year's work in his section of this report.

The annual report for Duncarse Children's Home submitted to the Public Assistance Committee shows that the children have all received the usual high standard of care and attention from the Matron and her staff. The numbers throughout the year have been about the average, and the incidence of sickness and particularly of infectious diseases amongst the children has been remarkably low.

The question of the equipment of the isolation and probationary block is still in abeyance, but it should be noted that it remains urgent. It is hoped that something may be done very soon to make this indispensable adjunct to the Home fit for occupation at short notice.

The administration of this Act was transferred to the Public Health Department on the 16th May, 1936.

The Act empowers local authorities to make provisions for the welfare of blind persons provided such persons have been previously certified as being so blind as to be unable to perform any work for which eye-sight is essential. After the Blind Persons Act, 1920, became operative the responsibility for its administration devolved upon the Town Council, the Parish Council and Education Authority, but following upon the changes brought about by the Local Government (Scotland), Act, 1929, a comprehensive scheme was agreed to by the Town Council. In substance that scheme is still in operation.

The following table shows the main services which are presently available for blind persons:—

Services Provided	Where Provided	Age at which Provided	Department Liable for Cost
Regional Clinic for Certification of Blindness	Nelson Street (called as required)	All Ages.	Public Health Department.
EDUCATION—			
(a) General Educa- tion & Industrial Training (elem.).	School	5-18 (may end after 16)	Education Dept.
(b) Industrial Train- ing or Technical Education.	Institution for the Blind	Between 16-18	Education Dept.
(c) Technical Edu- cation.	Do.	From 18 or later. Age till completion of approved course.	Education Dept.
Employment as Journeyman.	Institution for the Blind	After Serving Apprenticeship.	Public Health Dept. pay a per capita grant of £55 per annum.

CARE AND/OR MAINTENANCE.	Boarding Out, Day Nursery, etc.	Under 5.	Public Health Department.
Maintenance.	a. School.	5-18 Years.	Education Dept.
	b. Training Institu- tion.	Between 16-18.	Education Dept.
	c. Training Institu- tion.	After 18 Years.	Public Health Department.
Domiciliary Assistance Registers (with the Assistance of Volun- tary Agencies).	Own Homes	All Ages.	Public Health Department. Public Health Department.

In addition to the above-mentioned provisions, other benefits accrue to certified blind persons, e.g., Old Age Pensions are paid at the age of 50 years instead of 70 years; wireless licences are issued by the Government free of charge; free transport facilities for which the Public Health Department pay the Transport Department an annual sum of £500 are granted on Dundee Corporation trams and buses; literature in Braille and Moon type is available for reading, etc., etc.

When the administration of the Act was transferred to this Department a condition was that the work would be done in co-operation with the Dundee Mission to the Outdoor Blind and with the Royal Dundee Institution for the Blind, and I wish to record my appreciation and thanks to the Superintendent and Manager of these institutions for their very valuable assistance in the execution of the work. The total number of certified blind persons in Dundee at 1st April, 1937, is shown, in age groups, in the following table :—

0—2	3—4	5—15	16—17	18—29	30—39	40—49
M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
1 —	— —	15 12	4 3	24 19	31 24	41 33
	50—69	70+	Total			
	M. F.	M. F.	M. F.	T.		
	100 134	56 133	272 358	630		

The work involved in providing the various benefits to the blind is very considerable. The Dundee Mission to the Out-Door Blind strive to consider the blind in every way possible. They are visited regularly in their own homes and are instructed in reading the Moon embossed type and to read and write Braille. Instruction is also given in useful and interesting occupations, and any new cases of blindness discovered are reported to the department for examination at the Regional Clinic. The Mission also instructs blind persons as to the procedure necessary for making applications to the Department of Health for Scotland for Old Age Pensions and provide medical attention to all blind persons who are

outwith the National Health Insurance Acts. The Mission have invested funds for granting pensions and allowances to blind persons, and this is done in a large number of cases.

The Royal Dundee Institution for the Blind also do much good work for the blind in their school and workshops.

The Education Department pay £35 per annum towards the education of each blind scholar in the Institution, and they also contribute when necessary towards the maintenance of each child therein. The Public Health Department pay allowances to necessitous trainees and also make a per capita grant of £55 per annum for every journeyman belonging to Dundee who is employed there.

The principal duties falling to be performed by this department are the certification of blind persons and the granting of domiciliary assistance to necessitous cases.

From 16th May, 1936, to 15th May, 1937, 28 sessions of the clinic were held, and a total of 200 persons were examined—167 from Dundee; 13 from the County of Angus; 12 from the County of Fife; and 8 from the County of Perth. 100 persons from Dundee were examined for the first time and 67 were re-examined. Of the 167 Dundee persons, 114 were certified blind within the meaning of the Act, and 53 were certified as not being blind. Eleven persons were unable through physical disability to attend the Clinic, and these were examined in their own homes.

Outside local authorities are charged a fee of 15/- for every person sent by them to be examined at the Regional Clinic.

The question of domiciliary assistance was considered by the Public Health Committee, and from 20th February, 1937, an enhanced scale was put into operation. The new scale is as follows :—

The weekly income of blind persons shall be augmented to a sum of :—

Adult blind persons,	27s 6d
Married couple (both blind),	40s 0d
Blind person aged 18—21 years,	20s 0d
Blind person aged 16-18 years,	15s 0d
Blind children	according to needs

Certain qualifying conditions are imposed to prevent blind persons soliciting alms or acting as street musicians, etc. The previous scale of domiciliary assistance was the ordinary Poor Law Scale with an additional allowance of 5/- in respect of blindness.

Prior to the enhanced scale of domiciliary assistance coming into operation there were 190 persons on the pay roll. At 15th May, 1937, there were 355 persons actually in receipt of assistance.

Domiciliary assistance is paid to the blind persons at the offices of the Dundee Mission to the Blind at the Caird Rest. This arrangement is much appreciated.

In connection with the dependants of blind persons, it should be known that these cannot be granted assistance under the Blind Persons Act, 1920. If such dependants are in need of assistance they must be considered by the Public Assistance Department, and it is very pleasing to record that the Director of Public Assistance acting on a recommendation of the Public Health Committee has arranged with the City Chamberlain from the beginning of the present financial year to pay the allowances due to dependants of blind persons at the Caird Rest along with the domiciliary assistance due to the actually blind persons. This is another arrangement which is very much appreciated by the beneficiaries and obviates the necessity of calling at two places for allowances.

There are two Dundee patients under treatment in the Bridge Epilepsy Weir Colony for epileptics. The patients, or their relatives, contribute towards the cost of their maintenance and the Public Health Committee make up the balance.

At 31st December, 1935, there were 52 persons receiving Insulin in terms of the Public Health (Scotland) Amendment Act, 1925. During 1936 there were 15 new applications, and these were all granted. In the course of the year five patients died. One patient left the city and one patient became entitled to Insulin under the National Health Insurance Acts so that at the end of 1936 there were 60 names on the Insulin Register.

Diabetes and the Supply of Insulin

The total amount of Insulin issued was 1,676 bottles of 5 c.cs. (100 units each) and 1,046 bottles of 5 c.cs. (200 units each). In 1935 these figures were 1,556 and 927 respectively. The sum of £33 15s 7d was collected from patients towards the cost of the Insulin supplied. Last year the sum collected was £50, the decreased collections being due to a fall in the cost of Insulin.

The Chief Sanitary Inspector in his report deals in detail with the progress made in the problem of slum clearance and rehousing of the citizens under improved conditions. Progress is necessarily slow and, considering the magnitude of the problem, that feature is at times discouraging. There is, however, much steady and solid work done and definite progress to report.

During the year 725 new houses were completed and handed over to the City Factor. Of these, 670 were provided for slum clearance purposes. The number 725 compares with 406 and 345 respectively for the two previous years. Private enterprise provided 291 houses intended mainly for sale to owner-occupiers. The number, 670, for slum clearance is admittedly inadequate for the needs, but it shows a gratifying increase over the previous years and helps to improve the average. In addition to the new houses, 54 were made available for occupation as a result of the conversion of shops into dwellings or the reconstruction and reopening of houses.

On the other hand the details of the work carried out under the Housing (Scotland) Acts make most impressive reading, and it is to be noted that during 1936 no fewer than 1,879 houses were dealt with in such a manner as to require the rehousing of the tenants, and reports and representations to the number of 806 had been held over until this year to be dealt with by the Housing and Factorial Committee. It is therefore obvious that the building rate must be still further and considerably accelerated, as this alone is the factor which slows up the housing programme.

Overcrowding as a problem is still being dealt with as coincident with insanitary housing conditions, and no special measures have been directed towards the relief of overcrowding beyond the preliminary survey made in 1935 and described in last year's report. From the number of individual complaints received and investigated in which the main feature is overcrowding there is little doubt that many cases are in a worse plight than the majority of families who suffer only from the sanitary defects of their houses. Admittedly, however, the two problems—unfitness and overcrowding—are coincident to a considerable extent, and more adequate measures directed towards slum clearance will have the effect of alleviating the worst cases of overcrowding. As many overcrowded families will have to be moved from fit houses to new houses of suitable size, every effort is being made to enlist the co-operation of the private house factors through their official organisation in a scheme

of "decanting." It is hoped that when a fit house is vacated in that way the factors will select a suitable tenant from a list of families requiring to be rehoused provided by the local Authority. The "pointage system," which has been evolved to ensure that the worst cases are rehoused first seems to be the fairest possible method which could be devised and in its application overcrowded families particularly where tuberculosis or chronic illness exists score heavily.

The greatest number of houses completed during the year are situated in Ward IV. at Mid Craigie, Maitland Street and Dens Road. The Authorities are to be congratulated upon the fine layout designs and architectural features of new schemes under construction at Beechwood. These are admirably situated on the north-west outskirts of the city, and full advantage is taken of the attractive site. There are also very fine layout plans approved for the proposed new schemes at Mid Craigie (2nd development), Magdalen's Kirkton and Linlathen.

The social amenities of these new housing estates are being kept well in mind. Plans are proposed for the provision of pleasure grounds and playing fields for both adults and children, hall and clubrooms, library, etc., for each estate so that there may be a self-governing organisation set up in each to direct the social activities and the use of the facilities provided. It is hoped by these measures to establish and maintain a satisfactory and happy communal life.

Common Lodging Houses.—A number of the common lodging houses were visited by the Housing and Factorial Committee. They were considered to be unfit for human habitation and extremely dangerous in case of fire. The licenses were not renewed, and accommodation for the inmates is being found elsewhere.

The number of cases of infectious disease made known to the Infectious Disease. Department by notification or otherwise during the year was 4,726, against 3,909 in 1935. Marked decreases are recorded in the incidence of scarlet fever, diphtheria, tuberculosis, chickenpox and whooping cough, but on the other hand there is a big increase in the incidence of measles. There are also minor increases in some of the other infections. The usual comments on the infectious diseases are made in the following paragraphs, and complete figures are given in the statistical section of the report.

Measles.

An epidemic of measles occurred in March and continued until June. During this period the Department were informed of 1,763 cases. Altogether 1,862 cases were reported during the year, and of these 402 were removed to hospital, thus giving an admission rate of over 21%. There were 38 deaths—6 under 1 year, 27 between 1 and 5 years; and 5 between 5 and 10 years. The disease was of a mild nature, and doctors and nurses were encouraged to send to hospital infants and children under 5 years of age who could not be properly treated in their own homes.

Whooping Cough.

The number of cases of whooping cough intimated during 1936 was 302 compared with 486 in the previous year. Nine cases proved fatal—4 under 1 year and 5 between 1 and 5 years. Fifty-one cases received hospital treatment. Whooping cough is a very serious malady with children of tender years, and everything possible must be done to protect them from infection.

Pneumonia.

There were 681 cases of primary pneumonia, and 29 of influenzal pneumonia notified as compared with 417 and 31 respectively in the previous year. Primary pneumonia prevailed throughout the whole 12 months, but was most evident in January and February — 368 notifications were received during these two months. Nineteen of the 29 influenzal notifications were also received during the same two months. 474 cases of primary pneumonia and 4 of influenzal pneumonia were removed to King's Cross Hospital. In the course of the year there were 196 deaths from pneumonia, and of this number 68 occurred in infants under one year; 22 between 1 and 5 years; 3 between 5 and 10 years; 4 between 10 and 15 years; 5 between 15 and 25; 7 between 25 and 35 years; 13 between 35 and 45; 14 between 45 and 55; 16 between 55 and 65; and 44 over 65 years. There were 14 deaths from influenza during the year, and of that number 5 were associated with pneumonia.

Scarlet Fever.

The number of notified cases of scarlet fever fell to the unusually low figure of 362 as compared with 845 in 1935. 243 cases received hospital treatment. There were 5 fatal cases. The causes of death were as follows:—Septic scarlet fever and myocarditis; septic scarlet fever; scarlet fever and cerebro spinal fever; scarlet fever and nephritis; scarlet fever, whooping cough and broncho pneumonia. The incidence of the disease was uniform throughout the year, and there were no special localised outbreaks.

The work done in connection with artificial immunisation was much less than in previous years. The details are as follows:—

Age Group	Dick Positive	Dick Positive and immunised	Dick Negative	Total
Under 5 years,	6	30	47	83
5—15 years,	2	23	67	92
Over 15 years,	2	8	29	39
Totals,	10	61	143	214

No cases of smallpox occurred during the year, but a number of persons who had been in contact with the disease on board ship were reported to the Department in the course of the year. These were all visited in their own homes and kept under observation during the quarantine period. Smallpox and
Chickenpox.

379 cases of chickenpox were reported in 1936, and of these 15 received hospital treatment—one on account of being complicated with scarlet fever; 7 were removed from institutions; 2 from lodging houses; 4 were removed on account of bad housing conditions; and one from aboard ship. The last-mentioned case was a lascar of the s.s. "City of London." The diagnosis was supported by the flocculation test.

There was also a marked decrease in the incidence of diphtheria during 1936. 320 cases were notified against 459 during the previous year. 311 cases were treated in hospital. There were 7 deaths—3 children between 1 and 2 years; 3 between 2 and 3 years; and 1 aged 8½. Six deaths occurred in hospital and one died at home before removal to hospital could be carried out. The circumstances concerning the fatal cases were enquired into, and there is evidence in 5 cases of delay in administering the specific remedy. In three of these the parents delayed calling in medical advice. In one case in addition to the diphtheria the patient (aged 2 3/12) suffered from fatty degeneration and an enlarged thymus gland. In another case the diphtheritic condition was complicated with measles and broncho pneumonia. Everything possible is done by the department to facilitate the early treatment of this disease by providing and encouraging unrestricted admission to hospital and supplying to the general medical practitioners diphtheria anti-toxin for therapeutic and prophylactic purposes. For these last mentioned services 777,000 units of diphtheria anti-toxin were issued during the year. Diphtheria.

The work in connection with artificial immunisation against diphtheria shows a big decrease as compared with the previous

year. 199 persons were dealt with by the Department, and of these 123 were found to be Schick negative; 12 were Schick tested and received three immunising doses; 52 were Schick tested and subsequently received one single dose of diphtheria toxoid (alum precipitated); and 27 received single doses without previous testing. In addition to these figures, 73 single doses were issued to medical practitioners for use with private patients. During the year there were 3 defaulters—2 were Schick tested and failed to return, and one was tested and received 2 doses.

Typhus Fever.

No cases of typhus fever were notified during the year.

Enteric Fever

During 1936 there were 5 cases of enteric fever notified, and 4 of these received hospital treatment. In 2 cases the diagnosis was confirmed as paratyphoid fever, in one case the accepted diagnosis was pneumonia and in the other influenza. The diagnosis in the home treated case was not confirmed, and the source of infection was not established. In one of the confirmed hospital treated cases the illness was suspected to be due to the consumption of water from a suspicious source outwith the city boundary. In the other confirmed case the source of infection was not established. In 1935 there was also 5 cases of the disease notified.

Cerebro-Spinal Fever.

Seventeen notifications of this disease were received during the year, and the diagnosis in 13 of the cases was accepted. Of the remaining 4 cases the diagnosis was bronchitis and urinary infection 1 case; tuberculosis meningitis, 2 cases; and marasmus and prematurity, 1 case. In one of the accepted cases the patient also suffered from scarlet fever. Of the 17 accepted cases 9 proved fatal. The cause of death in six cases was cerebro spinal fever; in one case scarlet fever and cerebro spinal fever; in one case tuberculosis meningitis and in one case marasmus and prematurity. In 1935 there were 11 notifications, but the diagnosis was only accepted in 6 cases.

Erysipelas.

Notifications of erysipelas numbered 198 compared with 154 in 1935. 103 cases were removed to hospital. There were 15 deaths—6 infants under 1 year; 1 aged 2 years and 8 adults.

Dysentery.

The incidence of dysentery rose from 16 cases in 1935 to 84 in 1936. 72 cases received hospital treatment, and there were 4 deaths—2 under 5 years and 2 adolescents. In the King's Cross Hospital section of this report this condition is dealt with by the Senior Resident Medical Officer. 49 cases were accepted as bacillary dysentery.

The incidence of these infections showed an increase during 1936. The figures were 34 cases of puerperal fever and 40 cases of puerperal pyrexia as compared with 21 and 36 respectively during 1935. Full details concerning these diseases are given in the Maternity Services section of this report.

During 1936 there were 64 notifications of ophthalmia neonatorum, and 15 of these received hospital treatment. Smears were taken in 48 cases—2 of these were positive, 8 were suggestive, and 38 were negative. In no case was there any loss of vision.

Four cases of recurring malaria were notified. None of these cases required hospital treatment. One case of encephalitis lethargica was notified. The date of onset in this case was during 1934. Three deaths were certified as being due to encephalitis lethargica in cases that had been previously notified. Three cases of acute anterior poliomyelitis were also notified, and one of these received hospital treatment. One case of infective jaundice was notified and the patient died. The certified cause of death was Weil's disease; carcinoma of gall bladder; secondary carcinoma of liver. Enquiries were made to establish the source of infection but without success. In this case the carcinomatous conditions of the gall bladder and liver was sufficient to explain the jaundice.

Particulars of the inspections and examinations under the statutes relating to food supply will be found in the report of the Chief Sanitary Inspector. The work of the Superintendent of the Slaughterhouse under the Public Health Meat Regulations (Scotland), 1932, is detailed in Tables XLIX. to LIII. of the Statistical Section of this report.

There has been no recognised outbreak of food poisoning in the city during the year.

The milk supply of the city has received the usual particular attention, and 77 samples of milk taken in the course of distribution were submitted for bacteriological examination. Of these, 48 were sold as ordinary sweet milk although in a few cases the milk had been Pasteurised, 14 as Pasteurised, 6 as Grade A (TT) and 9 as Certified Milk. All the samples of Grade A (TT) and of Certified milk conformed to the prescribed standards of bacteriological cleanliness except two of the latter group. In seven cases the Pasteurised milk was unsatisfactory, while 10 samples of ordinary sweet milk were of doubtful cleanliness and 7 (14.6%) were definitely dirty.

Special tests for the presence of live tubercle bacilli were carried out with 23 of the samples from various groups, and in all cases the results were negative.

The above figures show no improvement over those for the previous year, indeed the samples of Certified and of Pasteurised milk are less satisfactory, but it must again be noted that the number of samples is so small that conclusions are hardly justifiable. One must feel, however, that with all the care and attention given to the production of those " Graded " milks no sample taken in the course of ordinary distribution of the milk should fall below the prescribed official standards which are in many cases attained even by producers of the ordinary ungraded milk.

On 1st October, 1936, the Milk (Special Designations) Order (Scotland), 1930, was revoked by a new Order which is now in operation.

The new Order introduces certain changes, of which the most important is the alteration in two of the milk designations.

The new designations are as follows:—

1. Certified.
2. Tuberculin Tested.
3. Standard.
4. Pasteurised.

They are a marked improvement on the old in that the misleading designation, " Grade A " disappears and is replaced by " Standard." It is hoped that milk qualifying for such a licence will become the basic quality for purposes of marketing liquid milk for human consumption. The number of samples taken for bacteriological examination particularly will be greatly increased, and provision has been made for the taking of some 400 to 500 samples in the current year instead of 70 to 80 as in the previous years.

The system of meat inspection was the subject of frequent consideration by the Public Health Committee. The matter had been raised at the Committee meeting in August, 1935, and formed the subject of a special report by the three meat inspectors, Medical Officer of Health, Superintendent of Slaughterhouses, and Veterinary Inspector. The Committee were particularly concerned with the comments by Mr Anderson, the Superintendent of Slaughterhouses, contained in that report on the methods of meat inspection.

tion outwith the city as evidenced by carcasses consigned to the meat markets. These comments are as follows:—" Numerous carcasses are consigned to the Meat Markets here from different towns and districts outwith the city, which are evidently animals slaughtered in emergency. Some of them bear traces of slight examination, while others bear no traces of examination, yet they are often accompanied by a certificate from the district meat inspector, certifying them to be fit for food. In many cases there is little or no attempt to carry out the provisions of the Regulations of meat inspection to the extent necessary to arrive at a final decision. In fact, some of them come here with a certificate and have marked on it ' sent for further examination.' In many of these cases a great deal of time is taken up daily in completing the examination of carcasses which ought to be done by the inspectors of the district from which they come before they are released, thus making it very apparent that we are still a very long way from having a uniform system of meat inspection." A copy of this report was sent to the Department of Health for Scotland, who asked that a record should be kept for six months of the carcasses bearing no trace of examination or traces of slight examination, even although accompanied by certificates showing them to be fit for food. This record was forwarded to the Department of Health in October, 1936. Representatives of the Department of Health for Scotland and of the Department of Agriculture for Scotland visited Dundee and arranged with the meat inspectors to notify them directly of any further cases that may arise so that if possible they could examine some of the carcasses, and, if necessary, pursue the matter in the area of origin. This is being done.

It is very evident from this review of the system of meat inspection that the work in the city is being done in a very efficient manner, and chief credit is due to Mr Anderson. On his shoulders has fallen the main burden of this work. It is important to note that this is so, because the monthly reports submitted to the Public Health Committee do not appear under his name and the records of work done throughout the year shown on Tables XLIX. and LIII. of this report do not suggest that Mr Anderson did practically all the work.

In August, 1936, Mr Hugh Ferrier, the Veterinary Inspector, gave up work after many years' service, and we wish him long years of happy retirement. Mr Andrew Spreull was appointed to the vacant post, and took up duty in September, 1936.

A summarised report of the work done by Professor Tulloch on behalf of the Department is contained in his section of this report, and the detailed total examinations are shown in Table XL.

The services and advice of Professor Tulloch and his staff are at all times available. These have been very much taken advantage of by the various sections of the Department, and I would again record my appreciation of their invaluable assistance and co-operation.

The subject of nuisances and sanitary defects generally are dealt with in great detail by the Chief Sanitary Inspector in his report. The only matter which calls for comment by me is the nuisance at Riverside Park. This nuisance has been the cause of complaint from numerous sources in the Perth Road district during the summer months of 1935, 1936, and the present year. In my view, these complaints are well founded, and I am satisfied that a nuisance which is injurious or dangerous to health does exist. This opinion is supported by the evidence contained in reports of the analyses of water mud, etc., taken from the water basins in Riverside Park where reclamation work is in progress.

The causes of the nuisance are in my opinion two in number :—

First—The dumping of tremendous quantities of putrifiable matter. Much of this consists of dry refuse deposited by the Cleansing Department.

Second—The sewer situated immediately to the west of the west basin discharges in such a position as to make it inevitable that the sewage will be swept into the artificial basin by the incoming tide. There has recently come to light evidence that a sewer is discharging excremental matter actually into the west basin at the north-east corner.

As the result of this continuous pollution over a long period, the mud in the basins is now in a filthy state, and it just requires a spell of warm weather, a low tide and a suitable wind to cause serious nuisance in the Perth Road district of the city.

Probably the nuisance has been more acute this summer, although it was very definite in 1935 and 1936. Owing to the dry refuse disposal plant being out of commission this year, crude dry refuse has been deposited for some time in the east basin. In 1935

and 1936 the dry refuse deposited consisted of screenings and imperfectly burned refuse from the disposal plant. This refuse contained large amounts of putrifiable organic matter although not so much as is contained in the crude dry refuse which is being deposited to-day.

I have advised that the following steps should be taken in order to abate the nuisance and prevent its recurrence:—

1. That no putrifiable matter of any sort should be deposited in either of the basins.
2. That steps should be taken to extend the sewer which discharges immediately to the west of the dump to such an extent as to ensure that sewage will not be swept into the artificial basin by the incoming tide.
3. That the breakwaters will be so constructed that a fresh supply of sea water will be retained in the basins at each tide. The polluted mud will thereby be covered at all times with water which, being changed at each tide, will ensure a plentiful supply of dissolved oxygen to oxidise the putrifiable organic matter.

Should further investigations prove that a sewer is actually discharging excremental matter into the west basin, immediate action must of course be taken.

The Sanitary Department is engaged every day in abating and in preventing nuisances caused by private individuals. It is unfortunate that the Local Health Authority should themselves be responsible for a nuisance which, if caused by a private individual, would result in their taking strong action. I hope that the Corporation will consider this matter as urgent and take the necessary steps so that when warm weather comes round again there will not be any further cause for complaint. It is important to note that even if the sources of pollution are cut off now, the mud will take some considerable time to purify itself.

Details of the port sanitary work will be found in Tables XXXVII., XXXVIII., and XXXIX., to which reference should be made.

Port Sanitary
Administration.

The activities at the port of Dundee show an all-round increase during the year.

The number of ships arrived from infected ports abroad or having suspicious illness on board was 127, and these were inspected by the Medical Officer. In the case of 16 of these which came direct from an infected or suspected foreign port, all the members of the crew were examined.

Eight cases of illness were removed to hospital as follows :—

MARYFIELD HOSPITAL—

DIAGNOSIS

- | | |
|---------------|----------------------------------|
| a. One lascar | Debility—Suspected Tuberculosis. |
| b. One lascar | Pulmonary Tuberculosis. |

KING'S CROSS HOSPITAL—

- | | |
|---------------------|---|
| c. One American | Mumps. |
| d. One lascar | Chickenpox. |
| e. Three Norwegians | Gastro-enteritis. Suspected
Dysentery. |

DUNDEE ROYAL INFIRMARY—

- | | |
|---------------|------------------|
| f. One lascar | Abdominal Pains. |
|---------------|------------------|

With reference to the case of chickenpox (d), one case described as smallpox had been landed at Suez from this ship, another described as chickenpox had been landed at London, and subsequently another described as smallpox was landed at Dunkirk. There appeared to be no doubt that the case occurring in Dundee was one of chickenpox.

A dock labourer engaged in discharging the cargo of oilcake from a ship which had carried a consignment of hides and bone meal to Marseilles contracted anthrax. Six samples of the oilcake were examined bacteriologically and the results were negative.

The practice of offering the facilities of the Venereal Diseases Treatment Centre to the personnel of visiting ships was continued as usual, and a number of cases availed themselves of treatment as out-patients.

Deratisation Exemption Certificates were issued in 29 cases, and in no case was it found necessary to secure deratisation. A number of ships requiring such certificates carried too much cargo to allow of adequate inspection, and they were permitted to proceed to their terminal port. There is a notable increase in the number of Exemption Certificates as distinct from Deratisation Certificates carried by the vessels of all types calling at this port.

This would appear to indicate that the measures employed to keep down the rat population are greatly improved and so effective that fumigation is seldom required.

The co-operation of the Customs Officials, the Tay pilots, and the ships' officers in the carrying out of the port sanitary work is greatly appreciated by the local authority.

The coming into operation in Dundee in May, 1936, of the ^{Superannuation.} Local Government and Other Officers Superannuation Act, 1922, has imposed on this Department a considerable amount of work in connection with the medical examination of the prospective or retiring employees. This work has been done without addition to the staff and without charge to the various Departments of the Corporation for which examinations have been carried out. After a period of experience a better idea can be formed of the volume of work involved, and recommendations may be submitted at a later date.

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TABLE I.

AGE and SEX DISTRIBUTION of POPULATION, 1936.

Population (estimated by Registrar-General), 178,692.

Percentage of Males to total population (Census, 1931)	...	44.9%
" " Females " " " "	...	55.1%
Estimated Sex Distribution for 1936—Males	...	80,233
Females	...	98,459

Age Groups.	Percentage to total at all ages (Census 1931).		Estimated Age and Sex Distribution for 1936.		
	Males.	Females.	Males.	Females.	Both Sexes.
0-5	9.7	7.7	7,783	7,581	15,364
5-10	10.2	8.5	8,184	8,369	16,553
10-15	8.9	7.3	7,141	7,188	14,329
15-25	18.1	17.2	14,522	16,935	31,457
25-35	15.2	15.8	12,195	15,557	27,752
35-45	11.9	13.2	9,548	12,997	22,554
45-55	10.7	11.8	8,585	11,618	20,203
55-65	9.1	9.9	7,301	9,747	17,048
65-75	4.8	6.1	3,851	6,006	9,857
75-85	1.3	2.2	1,043	2,166	3,209
85 and over	.1	.3	80	295	375
All Ages	100.0	100.0	80,233	98,459	178,692

TABLE II.

Estimated Population in various Wards, 1936.

WARD.	Population (Census 1931).	Percentage to total Population (Estimated).	Estimated Population for 1936.
I. ...	16,846	9.6	17,155
II. ...	11,698	6.7	11,972
III. ...	16,499	9.4	16,797
IV. ...	17,428	9.9	17,691
V. ...	24,720	8.2	14,653
VI. ...	17,240	9.8	17,512
VII. ...	22,355	7.7	13,759
VIII. ...	18,975	10.8	19,299
IX. ...	19,092	10.9	19,477
X. and XI.	10,732	6.1	10,900
XII. ...	—	10.9	19,477
Totals	175,585	100.0	178,692

TABLE III.
Return Showing the Causes of Death (Corrected for Transfers) at the Different Age periods during 1936 :—

CAUSE OF DEATH.	ALL AGES.			AGE.												85 & Over
	Total.	Males.	Females.	—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—		
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	38	15	23	6	27	5	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	5	1	4	4	4	1	...	...	...	...	...	...	...	...	...
Whooping Cough ...	9	5	4	4	5	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	7	5	4	7	6	1	...	...	...	...	...	...	...	...	...
Influenza ...	14	7	7	1	...	...	1	...	...	2	1	2	2	5	...
Cerebro-Spinal Fever ...	6	2	4	2	3	...	...	...	1	...	...	...	...	...	...
Other Epidemic Diseases ...	22	15	7	7	2	...	...	2	3	...	...	3	4	1	...
Tuberculosis of Respiratory System ...	107	47	60	...	2	...	4	24	25	23	14	11	3	1	...	
Other Tuberculous Diseases ...	39	22	17	2	11	5	5	7	3	1	1	2	1	1	...	
Cancer, Malignant Disease ...	333	134	199	...	...	...	...	1	5	17	44	88	103	61	...
Diabetes Mellitus... ..	22	6	16	...	1	...	...	...	...	...	1	7	11	1	...
Diseases of Nervous System ...	289	130	159	5	4	...	1	7	6	9	22	51	85	14	...	
Diseases of Circulatory System ...	618	275	343	...	1	1	3	7	8	13	41	101	207	193	...	
Bronchitis ...	123	61	62	6	1	...	...	4	...	5	5	19	38	37	...
Pneumonia (all forms) ...	196	106	90	68	22	3	4	5	7	13	14	16	25	16	...	
Other Respiratory Diseases ...	39	14	25	...	1	...	1	...	2	1	3	8	11	9	...	
Diarrhoea, etc. (all ages) ...	33	21	12	15	11	...	...	1	2	1	...	2	...	1	...
Appendicitis ...	24	12	12	...	1	5	5	2	3	...	2	3	3	...	...
Other Digestive Diseases ...	75	37	38	3	5	2	...	3	2	3	15	14	19	8	...	
Acute and Chronic Nephritis ...	66	31	35	...	...	1	1	...	1	3	14	17	20	9	...
Other Diseases of Genito-Urinary System ...	53	32	21	...	1	...	...	1	2	2	4	10	20	11	...
Puerperal Sepsis ...	4	...	4	...	...	...	...	2	2	...	...	...	...	...	...
Other Puerperal Causes ...	18	...	18	...	...	...	...	3	12	3	...	...	...	...	...
Congenital Debility, Premature Birth, Malformations, etc. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Old Age ...	133	81	52	126	2	1	...	3	1	...	...	...	...	...	...
Violent Deaths ...	60	23	37	...	...	...	...	...	...	...	...	...	7	30	...
All other Causes ...	101	56	45	4	7	5	3	9	6	12	12	18	13	10	...	
	92	45	47	7	5	6	5	9	1	7	12	17	11	11	...	
All Causes	2526	1181	1345	256	122	36	31	90	92	115	205	380	583	490	117	

TABLE IV.

Death Rates at various age-periods (from all causes)
each year.

1932-1936.

Ages. Periods.	1932		1933		1934		1935		1936	
	No. of Deaths.	Death Rate.	No. of Deaths.	Death Rate.	No. of Deaths.	Death Rate.	No. of Deaths.	Death Rate.	No. of Deaths.	Death Rate
All ages	2444	13.8	2577	14.5	2417	13.6	2346	13.2	2526	14.1
0-5 years	367	24.1	433	28.4	370	24.3	295	19.3	378	24.6
5-10 ..	37	2.3	36	2.2	29	1.8	31	1.9	36	2.2
10-15 ..	23	1.6	34	2.4	32	2.3	20	1.4	31	2.2
15-25 ..	77	2.5	80	2.6	78	2.5	73	2.3	90	2.9
25-35 ..	102	3.7	109	4.0	91	3.3	97	3.5	92	3.3
35-45 ..	145	6.5	135	6.0	152	6.8	139	6.2	115	5.1
45-55 ..	198	9.9	222	11.1	198	9.9	185	9.2	205	10.1
55-65 ..	404	23.9	413	24.4	403	23.8	374	22.0	389	22.8
65-75 ..	569	58.3	571	58.4	548	56.0	531	54.0	583	59.1
75-85	415	130.7	443	139.2	405	127.3	501	156.6	490	152.7
85 and over	107	288.4	101	270.8	111	297.6	100	266.7	117	312.0

TABLE V.

Death Rate (from all causes) each month during the years
1932-1936.

(From Registrar General's monthly returns.)

Month.	1932	1933	1934	1935	1936
January ...	13.1	29.0	15.5	16.4	18.5
February ..	15.2	23.1	14.4	16.0	18.6
March ...	15.5	14.9	13.1	15.5	14.7
April...	17.0	12.3	14.9	13.8	14.5
May ...	14.6	12.5	13.3	13.6	13.7
June...	13.3	11.7	13.0	10.7	13.5
July ...	11.4	9.7	13.1	12.6	11.3
August ...	12.3	10.5	11.7	10.6	12.3
September ...	12.4	13.2	10.9	11.3	11.0
October ...	12.5	12.5	13.5	10.8	12.4
November ...	13.2	11.3	14.3	13.3	14.3
December ...	15.3	14.0	16.1	14.3	15.1

TABLE VI.

Death-rate (from all causes) in various Wards each year since 1922.

Year.	Whole	W A R D S.										
	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11	12
1922	16.7	10.0	17.0	18.1	16.5	14.4	18.1	15.0	18.1	15.3	14.0	—
1923	14.7	15.0	14.0	14.8	14.0	12.8	16.4	15.0	15.4	14.3	12.1	—
1924	16.4	15.7	10.6	17.2	14.8	13.5	18.0	10.5	17.6	16.6	13.4	—
1925	16.7	17.8	15.3	18.4	15.9	15.3	16.8	15.2	17.6	18.6	12.8	—
1926	14.8	15.7	15.5	16.7	14.0	12.5	14.8	14.5	15.5	14.1	13.2	—
1927	16.9	16.9	17.9	19.4	15.7	15.2	17.6	16.3	16.5	18.0	12.8	—
1928	15.1	10.6	15.2	17.3	13.0	13.9	13.6	14.8	14.0	15.8	11.8	—
1929	16.0	16.1	15.7	17.8	14.2	13.6	14.4	16.1	16.9	16.1	12.9	—
1930	16.0	17.3	14.0	16.2	13.0	15.3	16.4	16.1	16.1	16.3	12.8	—
1931	13.9	12.4	15.6	13.5	14.1	13.2	14.1	12.7	14.2	14.7	11.2	—
1932	13.8	12.7	14.4	12.6	12.9	12.6	15.5	11.7	15.8	14.6	13.1	—
1933	14.5	11.8	13.6	14.7	13.6	13.6	15.1	14.7	14.8	14.7	13.1	—
1934	13.6	12.9	14.3	15.8	13.0	12.1	10.9	12.8	14.6	12.1	14.6	—
1935	13.2	10.1	14.2	13.3	12.3	12.0	11.2	14.2	12.3	14.0	13.2	—
1936	14.1	10.1	14.1	12.0	13.3	14.7	14.1	14.3	14.9	13.4	14.6	14.4

TABLE VII.

Birth-rate in various Wards each year since 1922.

Year.	Whole	W A R D S.										
	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12
1922	24.6	27.2	24.6	24.6	22.5	21.1	27.5	24.6	28.3	25.1	19.3	—
1923	24.0	27.7	24.6	26.0	21.8	22.3	27.7	25.8	23.5	24.0	13.6	—
1924	22.0	23.1	21.8	25.5	20.8	21.3	24.7	20.1	26.9	23.7	14.0	—
1925	21.8	23.3	19.9	22.2	21.7	20.2	24.1	22.1	25.0	22.1	14.4	—
1926	21.9	24.7	23.2	20.5	19.6	18.9	25.1	20.3	24.2	23.4	10.9	—
1927	20.4	24.6	20.6	25.0	18.1	18.5	22.4	20.1	22.2	18.9	11.6	—
1928	20.3	25.5	19.4	23.1	18.2	18.3	22.0	20.6	21.9	18.9	15.1	—
1929	20.9	25.3	17.6	25.0	16.7	20.3	22.9	20.0	23.7	21.6	12.9	—
1930	21.1	25.6	18.4	24.2	18.7	21.5	21.6	20.8	21.4	22.0	14.0	—
1931	19.5	21.0	15.4	22.6	18.3	17.2	23.5	15.8	22.5	22.1	15.0	—
1932	18.5	18.3	17.1	23.2	15.5	18.5	23.1	17.2	18.6	18.6	13.2	—
1933	17.5	17.9	16.4	20.2	14.9	17.2	20.0	18.7	17.1	18.2	10.9	—
1934	18.7	14.3	21.2	19.8	13.5	20.2	22.0	21.3	19.9	17.2	10.8	—
1935	17.9	19.1	16.3	20.5	15.3	17.2	18.6	19.7	18.8	18.3	11.8	—
1936	17.7	17.0	15.3	18.3	16.3	20.1	17.0	20.5	19.5	15.6	13.2	19.8

TABLE VIII.

Infantile Death-rate (per 1,000 births) in various Wards each year since 1922.

Year.	Whole	W A R D S.										
	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12
1922	109	81	101	136	121	109	115	99	125	93	76	—
1923	98	89	79	121	76	119	121	78	88	92	74	—
1924	120	104	144	137	121	112	133	108	96	136	71	—
1925	120	150	128	162	124	118	119	85	150	123	57	—
1926	103	114	75	110	94	96	100	100	132	98	66	—
1927	138	121	160	127	137	139	175	135	140	130	62	—
1928	102	93	126	82	61	108	96	79	111	127	65	—
1929	102	91	101	116	80	124	80	101	119	87	86	—
1930	113	101	101	117	109	92	135	124	113	135	60	—
1931	92	87	94	86	75	75	113	88	112	116	19	—
1932	72	52	54	65	44	63	100	70	101	89	42	—
1933	98	92	123	101	76	116	121	81	85	88	51	—
1934	74	53	55	94	101	79	60	73	87	72	34	—
1935	68	61	87	73	48	74	62	56	55	82	63	—
1936	81	69	60	81	83	75	94	74	77	82	104	85

TABLE IX.

Death-rate in various Wards each year since 1922 from principal Epidemic Diseases.

Year.	W A R D S											
	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11	12
1922	.80	1.09	.72	.66	.67	.95	1.08	.89	.84	.43	.54	—
1923	1.17	1.65	.97	1.03	.77	1.00	1.48	1.29	1.75	1.12	.36	—
1924	1.69	1.51	2.42	1.93	1.54	1.43	2.67	1.45	1.59	1.71	.36	—
1925	1.70	1.58	1.60	2.49	1.27	.57	.90	.82	1.21	.37	.27	—
1926	.79	.96	.72	1.24	.79	1.60	1.89	1.82	2.21	1.70	.46	—
1927	1.43	2.16	1.25	2.32	1.45	1.13	1.44	1.19	.93	1.78	.54	—
1928	.65	1.08	.55	.67	.47	.79	.66	.43	.93	.47	.09	—
1929	.38	.35	.40	.57	.37	.36	.46	.11	.48	.38	.09	—
1930	.78	.63	.41	.95	.64	.63	1.03	.39	1.56	.97	.18	—
1931	.84	.89	.76	.48	.75	.56	1.28	.51	1.37	1.46	.47	—
1932	.68	.47	.68	.42	.69	.68	.98	.45	1.05	.83	.46	—
1933	1.08	.94	1.26	1.80	1.14	.92	1.15	.93	.52	1.14	1.30	—
1934	.72	.41	.76	.90	.63	.48	.81	.67	1.04	.88	.65	—
1935	.40	.23	.50	.60	.28	.40	.34	.31	.26	.51	.28	—
1936	.57	.41	.42	.54	.51	.61	.80	.22	.83	.72	.64	.46

NOTE.—Figures are for 18 Infectious Diseases (excluding Infantile Diarrhoea).

TABLE X.

Pulmonary Tuberculosis Death-rate in various Wards each year since 1922.

Year.	W A R D S											
	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12
1922	.98	.54	1.12	.95	.87	1.17	1.18	.72	1.16	.92	.63	—
1923	.93	1.24	1.05	1.15	.82	.69	1.08	.89	1.27	.93	.45	—
1924	.85	1.30	.56	.54	.92	.65	1.13	1.00	.95	.88	.45	—
1925	.87	.89	.80	1.12	.74	.80	1.12	.66	.79	1.06	.86	—
1926	.81	.96	.79	.87	.32	.93	.56	.77	.95	1.17	.54	—
1927	.89	1.35	.66	1.10	.57	.96	.77	.76	.78	1.20	.45	—
1928	.80	.74	.47	.98	1.09	1.00	.66	.65	.83	.63	.54	—
1929	.78	.56	.81	.94	.64	.54	.91	.62	1.07	1.08	.55	—
1930	.76	1.05	.73	.70	.43	.90	.46	1.18	.91	.70	.09	—
1931	.73	.53	.68	.79	.69	.64	.81	.98	.79	.68	.28	—
1932	.61	.65	.68	.54	.63	.60	.40	.51	1.36	.52	.09	—
1933	.58	.29	.59	.48	.63	.60	.63	.56	1.10	.52	.46	—
1934	.54	.53	.25	.60	.57	.44	.58	.56	.99	.41	.65	—
1935	.67	.82	.67	.78	.57	.60	.40	.75	.73	.93	—	—
1936	.60	.47	1.00	.60	.34	.48	.69	.80	.41	.51	.37	.72

TABLE XI.

Tuberculosis (all forms) Death-rate in various Wards each year since 1922.

Year.	W A R D S											
	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11	12
1922	1.37	.82	1.44	1.31	1.43	1.51	1.80	1.00	1.63	1.36	.63	—
1923	1.43	1.65	1.46	1.45	1.29	1.18	1.71	1.34	1.86	1.32	.64	—
1924	1.23	1.51	.80	1.38	1.18	1.04	1.64	1.40	1.48	1.07	.54	—
1925	1.22	1.37	1.12	1.37	1.11	.93	1.41	1.10	1.37	1.38	.82	—
1926	1.12	1.43	1.19	1.18	.53	1.19	.73	1.21	1.26	1.64	.63	—
1927	1.16	1.69	1.02	1.40	.67	1.26	1.05	.87	1.04	1.33	.54	—
1928	1.05	.88	.86	1.22	1.30	1.22	.91	.92	1.04	.89	.63	—
1929	1.05	.77	1.29	1.20	1.02	.76	1.03	1.01	1.28	1.35	.64	—
1930	1.06	1.68	1.14	.76	.70	1.31	.69	1.46	1.18	.92	.23	—
1931	.95	.71	.76	.97	.89	1.01	1.28	1.25	.95	.83	.28	—
1932	.78	1.00	.84	.78	.69	.88	.58	.53	1.17	.57	.09	—
1933	.84	.53	.59	.84	.91	.76	.98	.67	1.57	.67	.65	—
1934	.80	.94	.42	.96	.68	.68	.86	.58	1.46	.67	.65	—
1935	.89	.99	.84	1.19	.48	.68	.69	1.02	.99	1.24	.09	—
1936	.82	.52	1.25	.71	.51	.82	.79	1.02	.73	.72	.64	1.08

TABLE XII.

Certified causes of death at the various ages
under 1 year for 1936.

CAUSE of DEATH.	Under 1 week	1 and under 2 weeks	2 and under 3 weeks	3 and under 4 weeks	Total under 4 weeks	4 weeks and under 2 mths	2 and under 3 months	3 and under 6 months	6 and under 9 months	9 and under 12 months	Total Deaths under 1 year
Enteric Fever ...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	1	...	5	6
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ...	...	...	...	...	...	...	1	3	...	...	4
Diphtheria ...	...	...	...	...	...	...	...	...	...	...	...
Infantile Paralysis...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis ...	...	...	...	...	...	...	...	...	1	1	2
Tuberculosis {	Lung ...	...	...	...	...	...	...	...	...	...	...
	General ...	...	...	...	...	...	...	...	...	1	1
	Abdominal ...	...	...	...	...	...	...	...	...	...	...
	Brain ...	...	...	...	...	...	...	1	...	...	1
	Other Forms ...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	...	...	...	...	1	...	...	1
Other Infectious Diseases ...	...	...	1	1	2	3	1	1	...	...	7
Pneumonia (all forms)	1	...	3	5	9	15	12	9	13	10	68
Bronchitis ...	1	...	1	1	3	1	...	1	1	...	6
Laryngitis ...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respirat'y System	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis ...	...	1	1	...	2	1	1	6	...	5	15
Other Diseases of Digestive System	...	...	...	...	...	...	...	...	3	...	3
Meningitis (not T. B.)	...	...	...	...	...	...	...	...	...	1	1
Convulsions ...	2	...	...	...	2	...	...	...	...	...	2
Other Diseases of Nervous System	...	...	...	...	...	...	...	...	2	...	2
Congenital Malformations ...	5	3	...	1	9	2	1	1	...	...	13
Congenital Debility, Icterus, Scelerema, Marasmus ...	8	...	4	1	13	9	7	4	1	...	34
Premature Birth ...	51	3	1	4	59	5	1	...	...	...	65
Injury at Birth ...	6	...	...	...	6	...	...	...	...	...	6
Other Diseases peculiar to Early Infancy ...	3	2	1	1	7	1	...	...	...	...	8
Suffocation, Ov'rlay'g	1	1	...	...	2	2	...	...	...	...	4
Rickets ...	...	...	...	...	...	...	...	...	...	...	...
Syphilis ...	...	...	...	...	...	...	...	...	1	...	1
Violence ...	...	...	...	...	...	...	...	...	...	...	...
All Other Causes ..	2	...	...	1	3	...	...	1	...	2	6
Totals ...	80	10	12	15	117	39	24	28	23	25	256

TABLE XIII.

Infant Mortality from various groups of causes 1890-94,
and each year from 1913.

Year.	Con- genital	Diges- tive.	Respira- tory.	Infectious Diseases.	All Other Causes.	Total.
Average						
1890-94	53	32	44	25	29	183
1913	62	40	28	12	20	162
1914	58	33	15	17	13	136
1915	64	38	38	51	18	209
1916	63	20	15	13	15	126
1917	57	24	24	13	19	137
1918	53	16	24	20	13	126
1919	60	13	30	8	15	126
1920	53	21	36	10	11	181
1921	58	16	19	13	8	114
1922	50	11	27	10	11	109
1923	46	4	21	13	14	98
1924	54	12	25	12	17	120
1925	53	10	35	16	12	126
1926	58	11	18	4	12	108
1927	50	14	46	17	11	188
1928	45	9	28	9	11	102
1929	48	12	30	7	5	102
1930	55	7	32	13	6	113
1931	42	7	24	12	7	92
1932	32	7	17	9	7	72
1933	48	9	23	12	6	98
1934	37	4	13	10	10	74
1935	39	5	13	4	7	68
1936	40	6	23	7	5	81

TABLE XIV.

Infant Mortality from all causes at various age periods
since 1916.

DEATH RATES.

Year	Births.	Under 1 Week.	Under 1 Month.	Under 8 Months.	Under 1 Year.
1916 ...	8,725	32	49	74	126
1917 ...	2,842	25	42	68	137
1918 ...	2,902	27	45	65	126
1919 ...	3,466	29	51	78	126
1920 ...	5,047	26	44	72	131
1921 ...	4,450	27	47	67	114
1922 ...	4,227	26	46	66	109
1923 ...	4,199	29	44	61	98
1924 ...	3,865	31	48	68	120
1925 ...	3,694	25	42	65	126
1926 ...	3,724	35	49	65	103
1927 ...	3,517	26	46	70	138
1928 ...	3,501	23	39	54	102
1929 ...	3,486	25	40	55	102
1930 ...	8,506	28	46	65	113
1931 ...	3,431	26	34	51	92
1932 ...	3,276	23	31	41	72
1933 ...	3,099	33	43	59	98
1934 ...	3,310	25	35	45	74
1935 ...	3,195	26	35	46	68
1936 ...	3,171	25	37	57	81

TABLE XV.

Deaths and Death-rates from various groups of causes
each year since 1932 (all ages).

DISEASE GROUP.	1932		1933		1934		1935		1936	
	Pop.		Pop.		Pop.		Pop.		Pop.	
	176,833		177,177		177,230		178,157		178,692	
	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.
Congenital ...	107	.61	153	.86	130	.73	127	.71	133	.74
Digestive ...	133	.75	130	.73	118	.67	116	.65	132	.74
Respiratory ...	390	2.21	403	2.27	302	1.70	290	1.63	358	2.00
Infectious ...	272	1.54	359	2.03	287	1.62	247	1.39	269	1.51
Circulatory ...	524	2.96	471	2.66	517	2.92	612	3.44	618	3.46
Genito-Urinary ...	75	.42	97	.55	83	.47	76	.43	119	.67
Malignant ...	297	1.68	321	1.81	335	1.89	305	1.71	333	1.86
Nervous ...	337	1.91	302	1.70	334	1.88	272	1.53	289	1.62
Other Causes ...	309	1.75	341	1.92	311	1.75	301	1.69	275	1.54
	2444	13.82	2577	14.54	2417	13.68	2346	13.17	2526	14.14

TABLE XVI.

Number of Illegitimate Births, number of Deaths (under 1 year)
of Illegitimate Infants, and Death-rate per 1,000 Illegitimate
Births since 1920.

Year.	Illegitimate Births.	Deaths of Illeg. Infants.	Rate per 1000 Illeg. Births.
1920	427	104	244
1921	344	65	189
1922	296	45	152
1923	331	43	130
1924	280	52	186
1925	235	33	140
1926	256	33	129
1927	268	48	179
1928	274	42	153
1929	265	29	109
1930	276	44	159
1931	254	28	110
1932	226	23	102
1933	254	45	177
1934	272	28	103
1935	240	24	100
1936	212	34	160

TABLE XVIII.

Five-yearly average annual Case Mortality (per cent.) from certain Infectious Diseases 1891-1925, and No. of Cases notified and intimated, No. of Deaths, and Case Mortality each year since 1926.

YEAR.	Smallpox.			Scarlet Fever.			Enteric Fever.			Typhus Fever			Diphtheria.			Measles.			Whooping Cough.		
	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.
1891-1895	—	—	3.7	—	—	3.3	—	—	15.1	—	—	9.8	—	—	38.0	—	—	8.7	—	—	70.8
1896-1900	—	—	—	—	—	4.2	—	—	15.2	—	—	22.5	—	—	23.2	—	—	8.4	—	—	47.9
1901-1905	—	—	5.4	—	—	2.3	—	—	16.6	—	—	14.0	—	—	16.2	—	—	10.2	—	—	38.8
1906-1910	—	—	1.5	—	—	3.0	—	—	11.3	—	—	12.1	—	—	17.3	—	—	10.4	—	—	17.6
1911-1915	—	—	5.3	—	—	2.5	—	—	9.9	—	—	13.3	—	—	11.1	—	—	11.0	—	—	13.2
1916-1920	—	—	6.7	—	—	1.4	—	—	11.2	—	—	26.7	—	—	11.0	—	—	5.7	—	—	5.2
1921-1925	—	—	—	—	—	2.4	—	—	7.3	—	—	—	—	—	9.8	—	—	6.3	—	—	8.9
1926	0	0	—	1275	28	2.2	25	1	4.0	0	0	—	786	66	8.4	77	1	1.3	149	4	2.7
1927	152	0	—	414	9	2.2	9	0	—	0	0	—	1023	69	6.7	2032	76	3.7	924	48	5.2
1928	5	0	—	208	0	—	3	0	—	0	0	—	623	30	4.8	1062	16	1.5	829	36	4.3
1929	0	0	—	822	3	.4	17	2	11.8	0	0	—	437	13	3.0	72	1	1.4	208	7	3.4
1930	0	0	—	302	0	—	15	1	6.7	0	0	—	403	13	3.2	2605	65	2.5	673	29	4.3
1931	0	0	—	246	0	—	18	2	11.1	0	0	—	395	17	4.3	383	14	3.7	840	44	5.2
1932	0	0	—	605	3	.5	5	0	—	0	0	—	372	17	4.6	2005	48	2.4	239	10	4.2
1933	0	0	—	1901	13	.7	29	1	3.4	0	0	—	368	10	2.7	504	0	—	893	35	3.9
1934	0	0	—	1188	11	.9	34	2	5.9	2	0	—	343	6	1.7	2140	56	2.6	499	17	3.4
1935	0	0	—	845	1	.1	5	0	—	0	0	—	459	16	3.5	216	13	6.0	486	12	2.5
1936	0	0	—	362	5	1.4	5	0	—	0	0	—	320	7	2.2	1862	38	2.0	302	9	3.0

TABLE XIX.

MALIGNANT DISEASES.

Number of Deaths during each year since 1921 :—

Year.	Males.	Females.	Total.
1921	113	176	289
1922	104	168	272
1923	115	146	261
1924	103	167	270
1925	114	173	287
1926	111	154	265
1927	111	165	276
1928	138	200	338
1929	101	179	280
1930	136	176	312
1931	122	154	276
1932	130	163	293
1933	142	179	321
1934	132	203	335
1935	126	179	305
1937	134	199	333

TABLE XX.

Death-rate per 10,000 population, from Malignant Diseases, each year since 1921, sexes given separately and together.

Year.	Males.	Females.	Total.
1921	15.13	18.80	17.17
1922	13.62	17.55	15.81
1923	15.17	15.36	15.27
1924	13.55	17.52	15.76
1925	15.18	18.37	16.95
1926	14.70	16.29	15.58
1927	14.50	17.21	16.01
1928	16.05	20.89	19.63
1929	13.61	19.27	16.76
1930	18.40	19.01	18.74
1931	15.44	15.88	15.68
1932	16.37	16.73	16.57
1933	17.85	18.34	18.12
1934	16.59	20.79	18.90
1935	15.75	18.23	17.12
1936	16.70	20.21	18.63

TABLE

Age and Sex Distribution of Deaths from Malignant Diseases

AGE GROUPS.		BUCCAL CAVITY						PHARYNX, OESOPHAGUS, STOMACH, LIVER and ANNEXA					PERITONEUM, INTESTINES and RECTUM				
		Jaw	Larynx	Mouth	Palate	Throat	Tongue	Tonsil	Gall Bladder	Liver	Oesophagus	Pharynx	Stomach	Bowel	Colon	Intestine	Rectum
Under 20	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20-25	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
25-35	M	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
35-45	M	..	..	..	..	..	..	..	..	1	..	4	..	..	..	..	1
	F	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
45-55	M	..	..	..	..	..	..	..	1	..	..	6	..	1	..	..	2
	F	..	..	..	..	..	..	..	..	..	..	5	..	3	1	..	..
55-65	M	1	..	..	..	..	..	1	2	5	..	17	..	1	..	..	3
	F	..	..	1	..	..	1	..	1	..	..	11	4	5	1	..	2
65-75	M	1	2	..	1	1	5	1	..	..	1	1	8	1	3	2	2
	F	..	2	..	..	..	1	..	3	2	..	2	15	5	5	4	3
75 and up	M	..	..	1	1	1	1	1	1	1	..	7	..	5	..	..	2
	F	..	..	..	..	..	..	..	8	1	..	6	7	3	3	..	2
Totals		2	4	2	2	2	8	2	5	16	9	3	80	17	26	11	18

XXI.

during 1936, showing parts of the body affected

FEMALE GENITAL ORGANS			BREAST	SKIN	OTHER OR UNSPECIFIED ORGANS															TOTALS
Ovary	Uterus	Vagina			Face	Abdomen	Bladder	Brain	femur	Kidney	Lung	Neck	Pancreas	Pelvis	Prostate	Spine	Testicle	Other Parts	Not Specified	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
2	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	6
..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	1	1	..	11
1	5	..	8	..	..	1	..	..	1	1	..	..	..	..	1	..	1	..	17
..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	2	..	27
2	7	1	8	..	..	1	..	1	1	2	..	..	..	..	..	2	1	..	36
..	..	..	..	..	1	..	..	..	2	1	2	..	6	..	2	2	..	..	52
1	6	..	5	..	1	1	1	..	1	..	..	..	..	..	..	..	..	..	45
..	..	..	1	..	..	..	..	..	..	2	..	..	2	..	1	..	..	..	58
2	3	..	6	..	4	1	..	..	..	..	1	..	..	..	..	1	..	..	27
8	24	1	30	1	7	4	1	1	2	12	4	4	1	8	1	5	11	1	48	
																			333	

TABLE XXII.

Five-yearly average annual Death-rates per 100,000 population 1876-1925, and, number of Deaths and Death-rates per 100,000 each year since 1926, from the Respiratory Diseases (including Bronchitis, Pneumonia (all forms), Pleurisy, Asthma, Laryngitis, etc.).

Year	Total Deaths	Death-rate per 100,000
1876-1880	...	508.5
1881-1885	...	482.3
1886-1890	...	463.2
1891-1895	...	473.2
1896-1900	...	419.8
1901-1905	...	387.1
1906-1910	...	345.6
1911-1915	...	329.5
1916-1920	...	327.3
1921-1925	...	278.6
1926	401	235.8
1927	592	343.3
1928	471	273.5
1929	607	363.2
1930	522	313.5
1931	429	243.7
1932	390	220.5
1933	403	227.5
1934	302	170.4
1935	290	162.8
1936	358	200.4

TABLE XXIII.

Five-yearly average annual Death-rates per 100,000 population 1876-1925, and, number of Deaths and Death-rates per 100,000 each year since 1926 from Diabetes Mellitus.

Year	Total Deaths	Death-Rate per 100,000
1876-1880	...	—
1881-1885	...	1.8
1886-1890	...	.5
1891-1895	...	2.0
1896-1900	...	2.4
1901-1905	...	5.5
1906-1910	...	5.9
1911-1915	...	8.5
1916-1920	...	5.5
1921-1925	...	6.9
1926	11	6.5
1927	19	11.0
1928	15	8.7
1929	20	12.0
1930	13	7.8
1931	24	13.6
1932	19	10.7
1933	18	10.2
1934	21	11.8
1935	23	12.9
1936	22	12.3

TABLE XXIV.

INFLUENZA.

Deaths in which Influenza was given as a cause each month
January 1927—December 1936.

MONTH.	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
January ...	6	1	6	2	0	1	67	0	5	3
February ...	14	0	55	1	4	6	31	0	5	2
March ...	27	3	4	3	20	7	3	1	3	2
April ...	3	1	1	3	11	1	0	0	0	0
May ...	0	0	0	0	2	3	2	0	2	2
June ...	2	0	1	1	1	0	1	0	1	1
July ...	0	0	2	1	0	0	0	2	0	0
August ...	0	0	0	0	0	2	2	1	0	0
September ...	3	1	0	1	2	0	1	0	0	0
October ...	6	2	0	1	0	0	1	0	0	2
November ...	4	3	2	1	1	2	0	1	1	1
December ...	4	7	1	2	3	2	4	8	1	1
Totals ...	69	18	72	16	44	24	112	13	18	14

TABLE XXV.

Deaths in which Influenza appears as a cause in death certificate
1927-1936 classified in age periods.

AGE PERIODS.	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Under 1 year	3	1	6	0	1	1	3	1	0	1
1- 5 years	4	0	3	0	0	0	4	0	0	0
5-15 „	3	0	2	1	0	1	1	0	0	1
15-25 „	3	1	2	0	0	0	2	1	1	0
25-45 „	11	4	12	1	5	4	21	2	2	2
45-65 „	21	4	14	6	17	6	30	4	4	5
65 and upwards	24	8	33	8	21	12	51	5	11	7
Totals	69	18	72	16	44	24	112	13	18	14

During 1936, no deaths were certified as due to Influenza alone,
while in 14 cases it was associated with :—

Bronchitis	...	...	...	1
Pneumonia	...	...	...	5
Other Respiratory Disease	...	...	...	2
Other causes	...	...	...	6

TABLE XXVI.

INFECTIOUS DISEASES.—Number of Cases of each disease notified and reported in Dundee during the Year 1936. Also number removed and number not removed to Hospital.

DISEASE	At all ages	At Ages—Years							Cases removed to Hospital	Cases not removed to Hospital
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards		
Enteric Fever	5	...	...	...	3	1	1	...	4	1
Scarlet Fever ...	362	9	132	171	28	17	3	1	243	119
Diphtheria ...	320	12	103	144	41	14	6	...	311	9
Erysipelas ...	198	14	9	9	16	54	74	22	103	95
Puerperal Fever	34	...	...	...	10	24	...	...	28	6
Puerperal Pyrexia	40	...	...	...	12	28	...	...	37	3
Ophthalmia										
Neonatorum ...	64	64	...	...	...	...	...	...	15	49
Dysentery ...	84	11	42	20	1	8	1	1	72	12
Acute Anterior Polio-myelitis	3	...	2	1	...	...	...	...	1	2
Acute Primary Pneumonia ...	681	191	236	91	38	51	47	27	474	207
Acute Influenzal Pneumonia ...	29	7	3	4	2	6	4	3	4	25
Malaria ...	3	...	...	...	...	2	1	...	...	3
Pulmonary Tuberculosis ...	232	...	9	50	65	80	25	3	178	54
Non-Pulmonary Tuberculosis...	109	4	27	33	20	19	4	2	74	35
Cerebro-Spinal Fever ...	17	5	7	3	1	1	...	...	14	3
Encephalitis Lethargica ...	1	...	...	...	...	...	1	...	...	1
Infective Jaundice	1	...	...	...	...	...	1	...	...	1
*Chickenpox ...	379	13	52	312	1	1	...	...	15	364
*Measles ...	1862	108	589	1157	6	2	...	...	402	1460
*Whooping Cough	302	42	86	174	...	...	...	...	51	251
Totals ...	4726	480	1297	2170	244	308	168	59	2026	2700

*Not notifiable in Dundee during 1936.

Tuberculosis—cases notified in a previous year and removed to Hospital for the first time during 1936—

Pulmonary, 23 ; Non-Pulmonary. 5 ; Total, 28.

TABLE XXVII.

Monthly Notifications and Intimations of Infectious Disease,
Dundee, 1936.

DISEASE	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Enteric Fever ...	...	...	...	...	...	...	3	...	1	...	...	1	5
Scarlet Fever ...	45	31	28	22	19	18	18	29	34	47	32	39	362
Diphtheria ...	45	27	54	18	24	16	11	20	38	33	30	24	320
Erysipelas ...	17	24	13	14	7	15	14	12	14	23	20	25	198
Puerperal Fever ...	2	6	5	1	4	5	3	3	...	1	1	3	34
Puerperal Pyrexia ...	3	3	2	4	2	3	3	3	6	4	2	5	40
Ophthalmia Neonatorum ...	6	4	6	6	4	6	8	3	8	1	3	9	64
Malaria ...	1	...	...	...	...	...	...	1	...	...	1	...	3
Dysentery ...	1	1	2	10	12	1	2	5	13	19	9	9	84
Acute Poliomyelitis ...	...	...	...	...	...	...	...	1	2	...	...	...	3
Acute Primary Pneumonia ...	266	102	33	25	34	25	23	21	37	33	40	42	681
Acute Influenzal Pneumonia ...	9	10	2	...	...	1	...	...	...	3	1	3	29
Pulmonary Tuberculosis ...	19	17	25	20	17	22	19	9	16	29	19	20	232
Non-Pulmonary Tuberculosis ...	11	17	13	15	5	6	5	5	4	12	9	7	109
Cerebro-Spinal Fever ...	2	...	1	1	...	1	3	2	2	3	1	1	17
Infective Jaundice ...	...	...	...	...	...	...	...	...	...	...	1	...	1
Encephalitis Lethargica ...	...	...	1	...	...	...	...	...	...	...	...	...	1
*Chickenpox ...	106	39	35	38	15	25	2	3	14	20	37	45	379
*Measles ...	3	50	256	723	568	216	22	8	5	3	5	3	1862
*Whooping Cough ...	8	10	6	11	16	17	3	16	25	28	56	106	302
Totals	544	341	462	908	727	377	139	141	219	259	267	342	4726

* Not notifiable in Dundee during 1936.

TUBERCULOSIS.—Notifications and Deaths, with corresponding rates per 1,000 population at various age-periods each year since 1918.

Year.	PULMONARY TUBERCULOSIS.					NON-PULMONARY TUBERCULOSIS.					65 & over.					45-65.					65 & over.				
	No.	Per 1000.	5-15.	15-25.	25-45.	No.	Per 1000.	45-65.	65 & over.	No.	Per 1000.	0-5.	5-15.	15-25.	25-45.	No.	Per 1000.	45-65.	65 & over.	No.	Per 1000.	45-65.	65 & over.	No.	Per 1000.
1918	Notifications	25	1.27	57	1.55	99	2.84	131	2.61	77	2.52	4	40	50	2.54	56	1.52	54	1.55	23	.46	13	.42	5	.50
	Deaths	11	.56	23	.63	63	1.81	76	1.51	74	2.42	9	.92	25	1.27	29	.79	15	.43	10	.20	9	.29	2	.20
1919	Notifications	13	.64	72	1.92	102	2.91	180	3.38	63	2.02	12	1.19	36	1.79	38	1.01	33	.94	17	.32	10	.32	3	.30
	Deaths	4	.19	8	.21	38	1.11	71	1.35	37	1.19	7	.69	24	1.19	19	.50	13	.37	11	.21	8	.25	8	.79
1920	Notifications	13	.67	74	2.05	94	2.62	159	3.07	75	2.40	8	.84	45	2.30	39	1.05	31	.86	12	.23	5	.16	0	—
	Deaths	1	.05	57	1.19	38	1.20	73	1.29	56	1.81	3	.84	31	1.81	18	.43	9	.28	8	.14	5	.16	0	—
1921	Notifications	21	1.43	57	1.81	105	3.30	128	2.77	54	1.62	3	.77	27	1.50	47	1.46	15	.47	8	.17	5	.14	2	.19
	Deaths	3	.20	5	.15	38	1.19	76	1.64	38	1.12	8	.77	14	1.15	16	.50	11	.34	8	.17	4	.12	3	.29
1922	Notifications	15	.99	68	2.05	109	3.34	130	2.75	73	2.10	3	.76	49	3.26	54	1.68	40	1.23	12	.25	7	.66	0	—
	Deaths	0	—	10	.31	36	1.10	64	1.35	53	1.53	5	.47	26	1.73	15	.46	19	.58	0	—	6	.17	1	.09
1923	Notifications	20	1.34	50	1.56	72	2.23	97	2.07	60	1.74	10	.95	50	3.35	70	2.19	52	1.61	27	.58	12	.34	5	.47
	Deaths	6	.40	11	.34	45	1.39	64	1.36	35	1.01	6	.57	35	2.34	16	.50	13	.40	6	.12	5	.14	3	.23
1924	Notifications	14	.93	48	1.50	73	2.25	101	2.15	51	1.47	8	.76	50	3.34	37	1.15	26	.80	20	.43	7	.20	2	.19
	Deaths	1	.06	8	.25	44	1.36	55	1.17	33	.96	5	.47	28	1.87	14	.44	9	.23	8	.13	7	.20	1	.09
1925	Notifications	8	.54	49	1.55	72	2.25	100	2.15	42	1.23	9	.88	36	2.44	82	1.01	27	.84	17	.37	5	.15	4	.39
	Deaths	4	.27	6	.19	39	1.22	57	1.23	36	1.05	6	.58	18	1.72	9	.28	15	.47	10	.22	4	.12	3	.29
1926	Notifications	3	.20	67	2.10	72	2.34	107	2.29	53	1.55	6	.58	37	2.49	41	1.29	22	.68	13	.28	7	.20	8	.29
	Deaths	0	—	4	.13	84	1.06	60	1.29	35	1.02	5	.48	20	1.35	12	.38	8	.25	7	.15	3	.09	2	.19
1927	Notifications	7	.47	80	2.48	76	2.33	80	1.69	40	1.15	5	.48	38	2.53	28	.87	13	.40	23	.40	6	.17	4	.33
	Deaths	3	.20	6	.19	45	1.33	70	1.48	26	.75	3	.29	21	1.40	5	.15	6	.18	3	.17	3	.09	4	.33
1928	Notifications	11	.73	82	2.54	62	1.90	109	2.31	47	1.35	7	.67	30	2.00	49	1.52	20	.61	20	.42	8	.23	4	.33
	Deaths	3	.20	5	.16	34	1.04	59	1.25	33	.96	4	.38	15	1.00	12	.37	7	.21	4	.08	2	.19	0	—
1929	Notifications	5	.34	63	2.01	65	2.06	88	1.92	33	.98	6	.59	30	2.06	23	.74	19	.60	14	.31	4	.12	0	—
	Deaths	3	.21	3	.10	27	.85	61	1.40	27	.80	6	.59	18	1.24	5	.16	10	.32	9	.20	3	.09	0	—
1930	Notifications	7	.48	80	2.57	59	1.87	81	1.77	35	1.04	5	.49	35	2.41	31	.99	17	.54	15	.33	5	.15	2	.20
	Deaths	1	.07	3	.10	30	.96	54	1.18	33	.98	5	.49	22	1.52	5	.16	9	.29	7	.15	4	.12	2	.20
1931	Notifications	5	.35	65	2.14	62	2.00	85	1.72	25	.68	3	.23	21	1.39	28	.92	19	.61	16	.32	2	.05	1	.08
	Deaths	0	—	0	—	29	.94	66	1.33	29	.79	4	.30	12	.79	7	.23	8	.26	4	.16	1	.11	0	—
1932	Notifications	4	.26	55	1.80	46	1.48	60	1.61	37	1.00	7	.53	29	1.91	49	1.60	30	.96	17	.34	4	.11	0	—
	Deaths	2	.15	5	.16	28	.90	46	.92	24	.65	2	.15	11	.72	7	.23	5	.16	6	.12	1	.05	1	.08
1933	Notifications	7	.46	69	2.25	56	1.80	90	1.89	30	.81	3	.23	21	1.90	26	.85	18	.58	15	.26	2	.05	0	—
	Deaths	1	.07	7	.23	22	.71	41	.82	27	.73	4	.30	24	1.44	8	.26	7	.22	14	.31	3	.08	0	—
1934	Notifications	8	.53	59	1.95	53	1.70	84	1.68	38	1.03	4	.30	21	1.38	40	1.31	15	.48	18	.36	5	.11	3	.25
	Deaths	1	.07	4	.13	23	.73	43	.86	22	.60	2	.15	13	.85	11	.36	12	.38	14	.27	2	.05	2	.15
1935	Notifications	12	.78	72	2.14	56	1.79	85	1.70	34	.92	4	.30	22	1.44	38	1.15	15	.48	18	.36	5	.11	3	.25
	Deaths	2	.13	5	.17	24	.73	34	.86	22	.60	2	.15	13	.85	11	.36	12	.38	14	.27	2	.05	2	.15
1936	Notifications	9	.84	67	2.16	57	1.77	89	1.74	35	.92	4	.30	22	1.44	38	1.15	15	.48	18	.36	5	.11	3	.25
	Deaths	2	.13	5	.17	24	.73	34	.86	22	.60	2	.15	13	.85	11	.36	12	.38	14	.27	2	.05	2	.15

TABLE XXIX.

TUBERCULOSIS.—Notifications and Deaths, with corresponding rates per 1,000 population, for each year since 1913 (since notification became compulsory).

YEAR.	Estimated Population.	NOTIFICATIONS AND CASE RATES.				DEATHS AND DEATH-RATES.			
		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.	
		No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.
1913	164,975	400	2.42	Non-Pulmonary Tuberculosis (all forms).		191	1.16	128	.77
1914	176,584	590	3.34	Tuberculosis (all forms).		249	1.41	126	.71
1915	177,300	485	2.73	Tuberculosis (all forms).		275	1.55	113	.64
1916	181,437	522	2.87	Tuberculosis (all forms).		259	1.42	95	.52
1917	181,773	432	2.37	Tuberculosis (all forms).		218	1.20	140	.77
1918	181,777	393	2.16	Tuberculosis (all forms).		256	1.40	90	.49
1919	185,388	442	2.38	Tuberculosis (all forms).		165	.89	83	.44
1920	184,084	423	2.29	Tuberculosis (all forms).		183	.99	69	.38
1921	168,217	376	2.23	Tuberculosis (all forms).		168	.99	59	.35
1922	172,061	401	2.33	Tuberculosis (all forms).		168	.98	67	.39
1923	170,901	309	1.80	Tuberculosis (all forms).		167	.98	78	.45
1924	171,295	295	1.72	Tuberculosis (all forms).		146	.85	65	.38
1925	169,361	280	1.65	Tuberculosis (all forms).		148	.87	59	.35
1926	170,060	308	1.81	Tuberculosis (all forms).		138	.81	52	.31
1927	172,444	288	1.67	Tuberculosis (all forms).		153	.89	47	.27
1928	172,214	318	1.85	Tuberculosis (all forms).		138	.80	42	.25
1929	167,109	260	1.56	Tuberculosis (all forms).		130	.78	45	.27
1930	166,495	267	1.60	Tuberculosis (all forms).		126	.76	49	.29
1931	176,006	245	1.39	Tuberculosis (all forms).		128	.73	39	.22
1932	176,833	229	1.30	Tuberculosis (all forms).		107	.61	31	.18
1933	177,177	255	1.44	Tuberculosis (all forms).		102	.58	46	.26
1934	177,230	246	1.39	Tuberculosis (all forms).		95	.54	47	.26
1935	178,157	265	1.49	Tuberculosis (all forms).		119	.67	39	.22
1936	178,692	231	1.29	Tuberculosis (all forms).		107	.60	39	.22

TABLE XXX.

TUBERCULOSIS.—Notifications and Deaths with corresponding rates per 1,000 population in various wards, 1936.

WARD.	NOTIFICATIONS AND CASE RATES.						DEATHS AND DEATH - RATES.					
	Pulmonary Tuberculosis.	Per 1000.	Non-Pulmonary Tuberculosis.	Per 1000.	Tuberculosis (all forms).	Per 1000.	Pulmonary Tuberculosis	Per 1000.	Non-Pulmonary Tuberculosis.	Per 1000.	Tuberculosis (all forms).	Per 1000.
I. ...	20	1.17	9	.52	29	1.69	8	.47	1	.05	9	.52
II. ...	19	1.59	6	.50	25	2.09	12	1.00	3	.25	15	1.2
III. ...	21	1.25	10	.60	31	1.85	10	.60	2	.11	12	.71
IV. ...	16	.90	10	.57	26	1.47	6	.34	3	.17	9	.51
V. ...	14	.95	7	.48	21	1.43	7	.48	5	.34	12	.82
VI. ...	29	1.65	12	.69	41	2.34	12	.69	2	.11	14	.80
VII. ...	22	1.60	10	.73	32	2.33	11	.80	3	.22	14	1.02
VIII. ...	22	1.14	13	.67	35	1.81	8	.42	6	.31	14	.73
IX. ...	24	1.23	12	.62	36	1.85	10	.51	4	.21	14	.72
X. and XI. ...	14	1.28	6	.55	20	1.83	4	.37	3	.27	7	.64
XII. ...	30	1.54	13	.67	43	2.21	14	.72	7	.36	21	1.08
No fixed abode	1	—	1	—	2	—	5	—	—	—	5	—
Totals ...	232	1.30	109	.61	341	1.91	107	.60	39	.22	146	.82

TABLE XXXI.

PULMONARY TUBERCULOSIS—Notifications and Deaths with corresponding rates per 1,000 population for each sex each year since 1915.

Year.	NOTIFICATIONS.				DEATHS.			
	Males.		Females.		Males.		Females.	
	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000
1915	216	2.75	269	2.72	106	1.35	169	1.71
1916	227	2.83	295	2.92	99	1.23	160	1.58
1917	181	2.25	251	2.48	100	1.24	118	1.16
1918	198	2.46	195	1.92	117	1.45	139	1.37
1919	238	2.90	204	1.97	90	1.09	75	.72
1920	223	2.74	200	1.95	95	1.16	88	.85
1921	197	2.64	178	1.90	81	1.08	87	.92
1922	170	2.23	231	2.41	75	.98	93	.97
1923	149	1.97	160	1.68	73	.96	94	.98
1924	135	1.78	160	1.68	75	.98	71	.74
1925	125	1.66	155	1.65	61	.81	87	.93
1926	135	1.79	173	1.83	67	.89	71	.75
1927	147	1.92	141	1.47	76	.99	77	.80
1928	159	2.08	159	1.66	67	.88	71	.74
1929	126	1.70	134	1.44	61	.82	69	.74
1930	131	1.77	136	1.47	64	.87	62	.67
1931	121	1.53	124	1.28	58	.73	70	.72
1932	112	1.41	117	1.20	55	.69	52	.53
1933	143	1.80	112	1.15	52	.65	50	.51
1934	124	1.56	122	1.25	46	.58	49	.50
1935	132	1.65	133	1.35	65	.81	54	.55
1936	124	1.55	107	1.09	47	.58	60	.61

TABLE XXXII.

Pulmonary Tuberculosis—Deaths in Institutions each year since 1927.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Total Deaths from Pulmon. T.B. -	153	138	130	126	128	107	102	105	119	107
No. of Deaths from Pulmon. T.B. in Institutions	70	74	70	64	71	58	49	61	66	60
Percentage of Total Deaths from Pul. T. B. dying in Institutions	45.8	53.6	53.8	50.8	55.5	54.2	48.0	58.1	55.5	56.1

TABLE XXXIII.

MATERNAL MORTALITY.

Certified causes of deaths of women from diseases and accidents connected with pregnancy and child-birth during 1936.

Accidents of pregnancy	...	...	...	5
Puerperal hæmorrhage	...	...	...	7
Puerperal septicæmia, including post-abortion sepsis	...	...	...	4
Toxæmias of pregnancy, albuminuria, convulsions	...	...	...	5
Other puerperal diseases	...	...	...	1
				22

TABLE XXXIV.

Maternal Mortality Rates—number of deaths per 1,000 registered births each year, 1927-1936.

1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
7.96	6.86	6.88	4.28	5.25	4.58	7.74	5.44	5.63	6.94

TABLE XXXV.

Number of births per 1,000 population, illegitimate births per 100 registered births, and marriages per 1,000 population, each year since 1914.

Year.	Birth-rate.	Illegitimate-rate.	Marriage-rate.
1914	25.2	9.1	8.3
1915	22.1	8.0	9.5
1916	20.5	8.0	7.1
1917	15.6	11.2	7.0
1918	16.0	10.6	7.5
1919	18.7	11.1	10.6
1920	27.4	8.5	11.4
1921	26.5	7.7	10.0
1922	24.6	7.0	8.8
1923	24.6	7.9	8.3
1924	22.6	7.2	7.6
1925	21.8	6.4	7.6
1926	21.9	6.9	7.7
1927	20.4	7.6	7.4
1928	20.3	7.6	7.8
1929	20.9	7.6	7.7
1930	21.1	7.9	8.1
1931	19.5	7.4	7.2
1932	18.5	6.9	7.3
1933	17.5	8.2	7.9
1934	18.7	8.2	8.7
1935	17.9	7.5	8.9
1936	17.7	6.7	8.2

TABLE XXXVI.
VACCINATION—1921-1935.

YEAR	Total Births (excluding Trans- scripts received)	Successfully Vaccinated		Insusceptible to Vaccination		Died before Vaccination		Conscientious Objections		Postponement or unaccounted for	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
1921	4509	1191	26.4	27	.6	379	8.4	2682	59.5	230	5.1
1922	4288	1193	27.8	12	.5	323	7.5	2556	59.6	204	4.8
1923	4275	1240	29.0	11	.2	284	6.6	2567	60.1	173	4.1
1924	3921	1077	27.5	16	.4	352	9.0	2271	57.9	205	5.2
1925	3750	978	26.1	17	.4	306	8.2	2270	60.5	179	4.8
1926	3822	1037	28.4	25	.7	309	8.1	2252	58.9	149	3.9
1927	3591	1228	34.2	49	1.4	307	8.5	1933	53.8	74	2.1
1928	3585	1198	33.4	43	1.2	253	7.1	2037	56.8	54	1.5
1929	3598	1118	31.1	63	1.7	240	6.7	2124	59.0	53	1.5
1930	3625	1111	30.6	32	.9	260	7.2	2186	60.3	36	1.0
1931	3531	972	27.5	64	1.8	188	5.3	2247	63.7	60	1.7
1932	3411	904	26.5	47	1.4	171	5.0	2236	65.5	53	1.6
1933	3245	836	25.7	28	.9	204	6.3	2135	65.8	42	1.3
1934	3466	853	24.6	34	1.0	163	4.7	2377	68.6	39	1.1
1935	3375	809	24.0	24	.7	182	5.4	2311	68.5	49	1.5

TABLE XXXVII

Port Sanitation.

DETAILS OF VESSELS ENTERING THE PORT DURING 1936.

	No. of Arrivals.	Tonnage.	No. Inspected by Medical Officer.	No. Inspected by Sanitary Inspector.	No. Reported Defective.	No. of Orders Issued.
From Foreign—						
Steamers	379	687,611	123	379	201	11
Motor Ships	21	33,061	4	21	...	...
Coastwise	749	297,608	...	401	16	...
	1,149	1,018,280	127	801	217	11

10 revisited by P.M.O.

TABLE XXXVIII.

Port Sanitation.

Principal Foreign Places from which ships arrived and notes of cargoes.

PORT OR COUNTRY.	No.	CARGOES
India (Calcutta, Chittagong, Colombo, etc.)	99	Jute, Gunnies, Linseed, Desiccated Coconut.
Hamburg	30	Sugar, Potatoes, Farina Phosphates, Fancy Goods, Peas, Beans.
Rotterdam	55	Sugar, Milk, Cheese, Fruit, Vegetables, Moss Litter, Steel Plates and Tubing.
Antwerp, Ghent and Dunkirk	29	Vegetables, Iron, and Steel.
Sweden	19	Paper, Paper Pulp, Box Boarding.
U.S.A. and Canada	27	Flour, Sugar, Pitch, Oebre, Tinned Fruit and Meat, Cheese, Wire.
Baltic Ports	41	Timber, and Flax.
Norway	24	Paper and Paper Pulp.
North Africa	14	Esparto Grass, Phosphates and Oil Cake.
West Indies, etc.	9	Sugar and Oil.
Soviet Russia	18	Timber and Flax.
Other European Ports	35	Timber, Cork, Pyrites, Phosphates Oilcake, Grain and Vegetables.

TABLE XXXIX. Port Sanitation.

Details of Action taken:—

Total Number of verbal intimations	389
Total Number of rat notices issued	11
Total Number of visits to ships	1078
Total Number of ships from infected or suspected ports	127
Do. (Direct)	16
Do. (Indirect)	111
Nuisances and defects attended to:—	385
Forecastles cleaned out	52
Messrooms cleaned	19
Galleys and store-rooms cleaned	27
Accumulation of food refuse	43
Choked or defective W.C.'s	41
Dirty W.C.'s	36
Discharge of foul water on quay	43
Ventilators obstructed	71
Excessive smoke emission	13
Defective Ports	14
Leaking deck plates	7
Rat refuges destroyed	19

385

In addition the following work was carried out while the vessels were in Port :—

Fresh water tanks cleaned out	45
Forecastles washed or painted	46
Bathroom or wash-places painted	31
Galleys washed or painted	39
W.C.'s painted	52

TABLE XL.

BACTERIOLOGICAL LABORATORY.

Examinations carried out on behalf of the Department by Professor Tulloch, in the Laboratory, University College, Dundee.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Wassermann Tests... ..	3660	3619	4107	4177	4588	4419	4053	4179	4452	4367	4562
Microscopical and other examinations under V.D. Scheme for—											
Syphilis	35	42	31	36	109	51	56	49	33	36	44
Gonorrhoea	1863	2227	2933	3301	3019	2779	3714	3725	4266	4687	3955
Swabs for diphtheria	1980	2560	1898	1500	1197	962	823	887	894	1156	1077
Widal tests for enteric fever	220	236	106	228	206	212	150	228	262	164	146
Sputum examinations	320	299	310	302	261	291	500	329	339	360	315
Examination of faeces, blood cultures, etc., for—											
Enteric fever	91	47	26	131	100	214	63	240	321	128	123
Dysentery	6	2	11	37	70	50	112	78	165	149	278
Infantile Diarrhoea	4	3	7	—	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	90	166	180	210	180	236	162	184
Milk examinations	101	97	75	74	105	11220	1481	78	84	1179	121
Food Poisoning—											
No. of outbreaks	(3)	(2)	(2)	(1)	(2)	(0)	(0)	(2)	(7)	(15)	(9)
No. of examinations	71	44	27	14	11	0	0	2	7	25	12
Cerebro spinal meningitis	8	10	16	13	24	12	15	25	34	41	64
Other examinations	*60	45	35	19	105	303	367	417	631	629	643
Totals	8419	9231	9582	9922	9960	10693	10350	10387	11737	12058	11524

*Includes 50 Rats examined for *Leptospira Icterohæmorrhagica*.

†Includes 1130 and 370 respectively for T.B. and for Epizootic Abortion of cattle, in collaboration with the Empire Marketing Board and the Department of Health for Scotland.

‡Includes 102 specimens of Milk examined in collaboration with the Scottish Milk Marketing Board.

TABLE XII.

DISINFECTION. 1936.

The table submitted below details the year's work in regard to disinfection.

MONTH	Bed Ticks	Beds	Mattresses	Bed Covers	Blankets	Sheets	Bolster Ticks	Bolster Cases	Pillow Ticks	Pillow Cases	Bed Panes	Aprons	H'dkerchiefs	Table Cloths	Towels	Wearing Apparel	Miscellaneous Articles	Total No. of Articles	No. o Homes from which articles were removed
January	...	...	14	151	112	87	...	20	10	75	...	...	9	1	5	758	812	2054	255
February	2	...	9	138	90	73	...	8	12	44	...	...	9	3	13	442	236	1079	135
March	...	...	28	156	117	70	...	21	35	59	...	...	12	...	5	374	202	1079	145
April	2	...	19	144	80	69	1	13	15	43	...	...	8	...	7	701	344	1446	232
May	1	...	14	127	80	59	...	11	17	40	...	...	6	...	2	510	317	1184	218
June	...	...	7	107	662	49	...	13	18	27	...	...	6	...	4	357	118	1368	130
July	34	50	48	155	102	36	4	11	27	27	2	...	6	...	7	168	87	744	93
August	234	...	17	140	353	85	...	14	31	76	...	7	9	...	4	242	71	1283	99
September	...	...	15	139	95	117	1	23	16	82	...	3	10	1	2	347	100	951	126
October	2	...	19	185	181	148	...	36	14	113	...	...	14	4	10	446	122	1294	156
November	...	...	19	144	106	93	...	19	18	74	...	...	18	...	8	591	148	1038	125
December	...	...	13	134	127	94	...	1	23	9	49	...	4	...	5	505	153	1117	140
Totals	275	50	222	1700	2105	980	6	190	236	669	51	10	111	9	72	5241	2710	14637	1834

The following figures relate to the articles disinfected and the houses concerned each year since 1925:—

Articles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Houses concerned	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936								
	32,978	29,430	22,721	16,642	20,976	19,994	15,892	20,265	28,714	20,408	16,730	14,637								
	2,234	2,042	1,709	1,276	1,718	1,748	1,477	1,981	2,515	2,167	1,574	1,834								

TABLE XLII.

FACTORIES, WORKSHOPS AND WORKPLACES

YEAR 1936.

1. Inspection of Factories, Workshops and Workplaces, including Inspections made by Sanitary Inspectors.

PREMISES		Inspection	NUMBER OF	
			Written Notices	Occupiers Prosecuted
Factories (including factory laundries)	...	510	0	0
Workshops (including workshop laundries)	...	1322	0	0
Workplaces (other than outworkers' premises)	...	370	0	0
		2,202	0	0

2. Defects found in Factories, Workshops and Workplaces

PARTICULARS	NUMBER OF DEFECTS			No. of Offences in respect to which Prosecutions were Instituted	
	Found	Remedied	Referred to H.M. Inspector		
Nuisances under the Public Health Acts†—					
Want of cleanliness	40	40	...	...
Want of ventilation	14	5	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances ... ..	...	...	...	...
Sanitary accommodation—					
Insufficient	8	4	...	...
Unsuitable or defective	3	1	...	...
Not separate for sexes	3	2	...	...
Offences under the Factory and Workshop Acts—					
Illegal occupation of underground bakehouse (S. 101) ... ..	...	...	...	...
Other offences	0	0	...	...
excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921)					
Total	*68	52	...	...

†Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901 as remediable under the Public Health Acts.

*In 29 instances the defects were notified by H.M. Inspector of Factories.

TABLE XLIII.

DUNDEE INFANT HOSPITAL.

Year to 31st December, 1936.

In Hospital, 1st January, 1936	...	...	...	34
Admitted in 1936	...	...	...	138
				<hr/>
				172

DISCHARGED—

Relieved	...	...	...	110
Unrelieved	...	...	...	2
Taken home	...	...	...	5
Transferred to Dundee Royal Infirmary				4
" King's Cross Hospital				6
" Maryfield Hospital	...			1
" Armitstead Convalescent				4
Sent Home—Contacts	...	...	...	2
				<hr/>
				134
				<hr/>
				38

DIED—

Broncho Pneumonia	...	...	...	2
Marasmus	...	...	...	2
				<hr/>
				4

In Hospital, 31st December, 1936 ... 34

Death Rate ... 2.9 per cent.

THE CASES TREATED WERE—

Marasmus	...	...	...	74
Debility	...	...	...	19
Rickets	...	...	...	4
Purpura	...	...	...	1
Basic Meningitis	...	...	...	1
Hydrocephalus	...	...	...	2
Pyelitis	...	...	...	2
Abdominal Tuberculosis	...	...	...	2
Generalised Tuberculosis	...	...	...	4
Duodenal Ulcer	...	...	...	1
Chronic Pneumonia	...	...	...	1
Broncho-Pneumonia	...	...	...	10
Nephritis	...	...	...	1
Birth Palsy	...	...	...	1
Gastro-Enteritis	..	...	...	15
				<hr/>
				138

Total Patient Days	...	...	...	11,599
Highest Daily Number	...	...	...	34
Lowest Daily Number	...	...	...	20
Average	...	...	...	31.69

TABLE XLIV.
 VENEREAL DISEASES SCHEME, 1931 to 1936.

Patients suffering from Venereal Diseases, attending the V.D. Centre, who :—

Year	Left before completing a course of treatment.												Left after completing a course of treatment but before final tests as to cure..												Were transferred to other Centres.												Were discharged from Centre after completion of treatment.												Were remaining on treatment at end of year.												Totals of all cases attending throughout the year.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	Both Sexes.				Males.				Females.				Both Sexes.				Males.				Females.				Both Sexes.				Males.				Females.				Both Sexes.				Males.				Females.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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TABLE XLVII.

Doses of Arseno-Benzol Compounds Issued.

		Treatment Centre.	Other Institutions.	Medical Practitioners.	Total.
1919	...	1,958	13	141	2,112
1920	...	6,362	18	472	6,852
1921	...	6,280	239	358	6,877
1922	...	5,135	239	239	5,613
1923	...	5,224	198	123	5,545
1924	...	3,887	275	504	4,666
1925	...	2,836	341	398	3,575
1926	...	2,286	264	423	2,973
1927	...	2,826	18	272	3,116
1928	...	2,997	154	253	3,404
1929	...	3,673	235	342	4,250
1930	...	6,884	380	388	7, 52
1931	...	3,362	113	327	3,802
1932	...	3,582	126	182	3,890
1933	...	3,594	118	216	3,928
1934	...	2,170	660	112	2,942
1935	...	2,874	532	321	3,727
1936	...	4,110	262	296	4,668

TABLE XLVIII.

LABORATORY WORK—The following examinations were carried out under the V.D. scheme each year since 1924 :—

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Wassermann Tests	3,261	3,513	3,660	3,619	4,107	4,177	4,588	4,419	4,053	4,179	4,462	4,367	4,561
Microscopical and other Examinations	1,657	1,723	1,898	2,269	2,964	3,337	3,128	2,830	3,770	3,774	4,299	4,687	3,999
	4,918	5,236	5,558	5,888	7,071	7,514	7,716	7,249	7,823	7,953	8,761	9,054	8,560

TABLE XLIX.

Unsound Food. All Seized at the Public Slaughter-Houses.

Number of Seizures, Weight (in lbs.) of Meat Seized, and Reasons for Seizure.

FOR YEAR ENDING 31st DECEMBER, 1936.

DISEASE	BEEF		MUTTON		PORK		TOTAL	
	Number	Weight	Number	Weight	Number	Weight	Number	Weight
(a) Tuberculosis ...	...	244,205	...	...	121	4,526	3,373	248,731
(b) Other Diseases :—								
Abscesses, Tumours, and Cysts	430	956	81	187	170	95	681	1,238
Actinomycosis ...	157	341	1	69	...	...	158	410
Blackleg ...	1	196	...	...	...	...	1	196
Decomposition ...	1	635	16	225	...	...	17	860
Dropsical Conditions	12	3,086	83	1,377	1	120	96	4,583
Fevered Conditions	54	7,435	124	2,220	39	101	217	9,756
Fractures and Bruises	100	6,049	46	385	23	266	169	6,700
Inflammation of Abdominal Organs	319	2,526	137	547	8	77	464	3,150
Melanosis	3	176	1	...	...	...	4	176
Pneumonia	46	898	46	469	23	22	115	1,389
Rheumatism	7	668	21	164	12	181	40	1,013
Septic Conditions	19	6,160	20	1,063	3	593	42	7,816
Swine Erysipelas	...	...	...	...	25	282	25	282
Uraemia	1	685	...	...	...	...	1	685
Wasted Conditions	1	89	12	374	...	...	13	463
Totals	4,403	274,105	588	7,080	425	6,263	5,416	287,448

TABLE L.

Shews the number of the different kinds of Animals Slaughtered at the Public Slaughter-houses each month during 1936, also the numbers of their carcasses found to be Diseased or Unsound, and the weight of each class seized and destroyed.

MONTH	Animals Slaughtered				Numbers of their Carcasses Diseased or Unsound				Weight (in lbs.) condemned from Carcasses of Animals Slaughtered on the Premises				
	Cattle	Calves	Sheep	Pigs	Cattle	Calves	Sheep	Pigs	Beef	Veal	Mutton	Pork	Total
1936													
January ...	1,505	11	2,528	517	400	..	154	32	26,699	...	675	719	28,093
February ...	1,240	9	2,242	516	366	...	159	29	20,047	..	461	429	20,937
March ...	1,288	10	2,340	582	409	..	193	46	22,239	...	210	426	22,875
April ...	1,334	10	2,304	492	426	2	120	28	20,983	59	641	334	22,017
May ...	1,296	8	2,043	358	418	3	82	30	22,133	..	543	470	23,146
June ...	1,273	16	2,196	296	355	4	68	30	19,706	92	93	361	20,252
July ...	1,280	13	2,344	229	357	6	98	43	23,603	72	130	658	24,463
August ...	1,256	12	2,480	221	356	4	127	40	18,877	93	117	537	19,624
September ...	1,394	20	2,669	330	424	1	197	38	25,126	65	395	269	25,855
October ...	1,378	15	2,594	476	409	5	158	65	21,552	89	520	687	22,848
November ...	1,341	11	2,406	512	400	5	108	36	17,668	130	527	203	18,528
December ...	1,158,5	18	2,625	618	447	3	120	41	24,632	101	435	799	25,967
Totals ...	15,970	153	28,571	5,147	4,767	53	1,584	458	263,265	701	4,747	5,892	274,605

TABLE LI.

Shews the number of the different kinds of Carcases, dressed and undressed, brought to the Slaughter-houses, each month during 1936, with the numbers found to be diseased or unsound, and the weight of each class seized and destroyed on that account.

MONTH	Carcases brought in				Numbers of them Diseased or Unsound				Weight (in lbs.) Seized and Condemned from Carcases brought in				
	Cattle	Calves	Sheep	Pigs	Cattle	Calves	Sheep	Pigs	Beef	Veal	Mutton	Pork	Total
1936													
January ...	216	...	291	13	8	...	12	2	1,966	...	184	55	2,205
February ...	244	2	390	44	1	...	15	...	673	...	116	...	789
March ...	225	...	355	43	8	...	18	...	1,657	...	173	...	1,850
April ...	225	...	285	42	2	...	5	...	378	...	218	...	596
May ...	282	...	517	33	2	...	2	...	708	...	21	...	729
June ...	193	1	537	16	4	...	2	...	330	...	167	...	497
July ...	230	...	384	27	4	...	4	...	139	...	8	...	147
August ...	264	...	594	28	1	...	1	...	158	...	26	...	184
September ...	239	1	296	5	9	1	4	1	821	65	99	20	1,005
October ...	265	...	358	21	9	...	11	1	1,992	...	226	...	2,218
November ...	225	...	260	9	5	...	25	1	918	...	597	2	1,517
December ...	204	...	325	12	6	...	17	1	399	...	433	294	1,126
Totals ...	2,812	5	4,572	293	59	1	116	6	10,139	65	2,268	371	12,845
Table L.	15,970	153	28,571	5,147	4,767	33	1,584	458	263,265	701	4,747	5,892	274,605
Total of Tables L. and LI.	18,782	156	33,143	5,440	4,826	34	1,700	464	273,404	766	7,015	6,263	287,448

TABLE LII.

The following is a synopsis of the organs seized and condemned in addition to the foregoing at the Slaughter-houses for the full year :—

CATTLE ORGANS		SHEEP ORGANS		PIGS' ORGANS	
Cows' Udders ...	1,856	Livers ...	44	Udders ...	20
Livers ...	2,240	Plucks ...	567	Plucks ...	167
Lungs ...	3,263	Kidneys ...	778	Kidneys ...	145
Hearts ..	1,200	Lungs ...	910	Livers ...	150
Kidneys ...	2,746			Lungs ...	77
Heads ..	1,135	Total ...	2,299	Total ...	539
Tongues ...	1,188				
Skirts ...	2,684				
Total ...	16,312				

TINNED AND FROZEN MEAT SEIZED FOR DECOMPOSITION.

Tinned Meat ...	24 lbs.
Frozen Ox Livers ...	106 „
Frozen Meat ...	417 „
Frozen Ox Kidneys ...	12 „
Total ...	559 lbs.

The number of Carcases wholly or partially condemned for Tuberculosis during each year for the last five years were as follows :—

YEAR	Bulls	Bullocks	Heifers	Cows	Calves	Sheep	Pigs	Total
1932	263	1,223	22	746	1	...	92	2,547
1933	236	1,399	17	895	2	...	93	2,642
1934	309	1,281	17	831	1	...	125	2,564
1935	287	1,520	21	985	1	...	107	2,921
1936	332	1,722	35	1,161	2	...	121	3,375

Statement shewing number of Animals Slaughtered, Wholly Condemned, Partially Condemned, and Weight (in lbs.) of Meat Condemned during the year 1936 :—

Class of Animal.	NUMBER OF ANIMALS.			Weight (in lbs.) of Condemned Meat.
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle ...	16,123	270	4,530	263,901
Sheep ...	28,571	60	1,524	4,812
Pigs ...	5,147	24	434	5,892

TABLE. LIII.

The totals for the years 1920 to 1935 were:—

Year.	Carcases Examined.				Numbers Diseased or Unsound.				Weight (in lbs.) of Meat Seized and Condemned.				
	Cattle.	Calves.	Sheep.	Pigs.	Cattle.	Calves.	Sheep.	Pigs.	Beef.	Veal.	Mutton.	Pork.	Total.
1920	20,933	250	29,795	2,386	627	51	170	58	174,715	2,955	6,707	5,931	190,308
1921	17,914	182	26,357	2,717	633	32	214	52	144,858	2,278	9,353	4,572	161,061
1922	18,825	207	31,139	4,199	879	38	350	120	188,971	1,762	13,537	6,974	211,244
1923	18,756	138	26,286	3,570	958	33	318	113	219,803	2,022	12,319	8,362	242,506
1924	18,276	184	25,691	4,037	1,382	18	485	242	209,771	714	13,219	9,875	233,579
1925	18,139	198	25,831	3,669	1,561	11	344	141	165,533	578	8,321	5,449	179,881
1926	17,469	145	28,416	2,586	3,161	22	523	127	203,663	1,043	8,491	5,605	218,802
1927	18,224	147	33,983	3,058	3,263	28	778	182	184,577	949	8,191	3,943	197,660
1928	19,328	126	31,697	4,171	2,801	19	1,262	298	163,617	1,115	6,920	6,741	178,393
1929	18,244	126	31,971	3,445	3,482	29	1,682	179	160,319	639	7,099	3,404	171,461
1930	18,689	88	31,590	2,996	3,653	19	1,133	299	170,738	328	9,144	4,510	184,720
1931	18,255	90	31,915	3,640	3,851	10	1,321	229	194,921	311	8,541	5,596	209,169
1932	15,847	134	36,484	4,158	4,723	14	2,522	253	205,963	447	6,033	4,583	216,826
1933	15,594	116	34,754	4,189	5,031	19	2,468	512	215,788	408	3,824	5,686	225,706
1934	16,016	201	33,285	4,870	4,391	22	2,369	320	250,083	898	4,982	5,556	261,519
1935	17,770	207	33,444	5,490	4,431	20	1,748	387	274,981	725	5,313	6,340	287,359

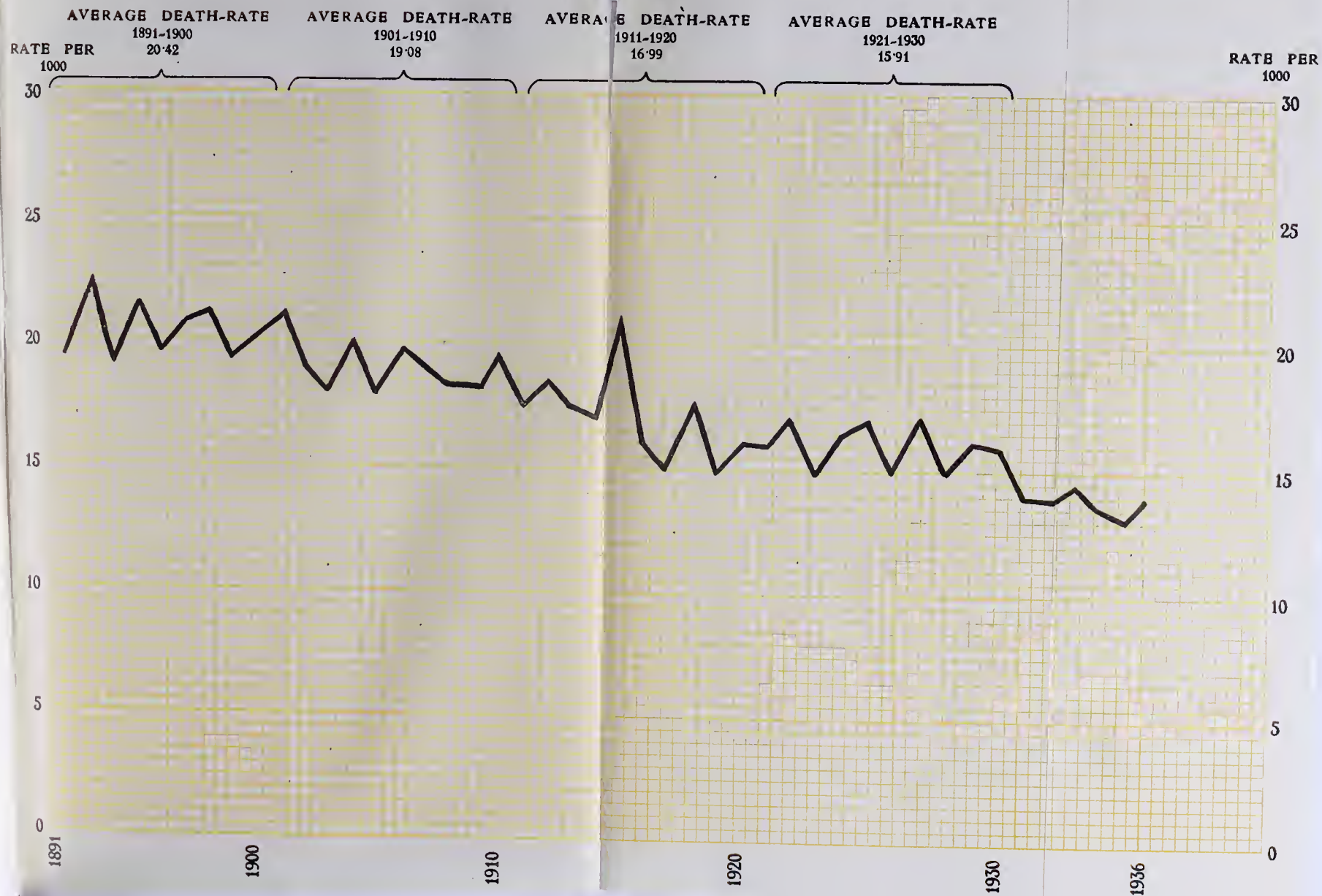
CITY OF DUNDEE

1

DEATH RATE per 1000 Population

(at all ages and from all causes)

1891-1936

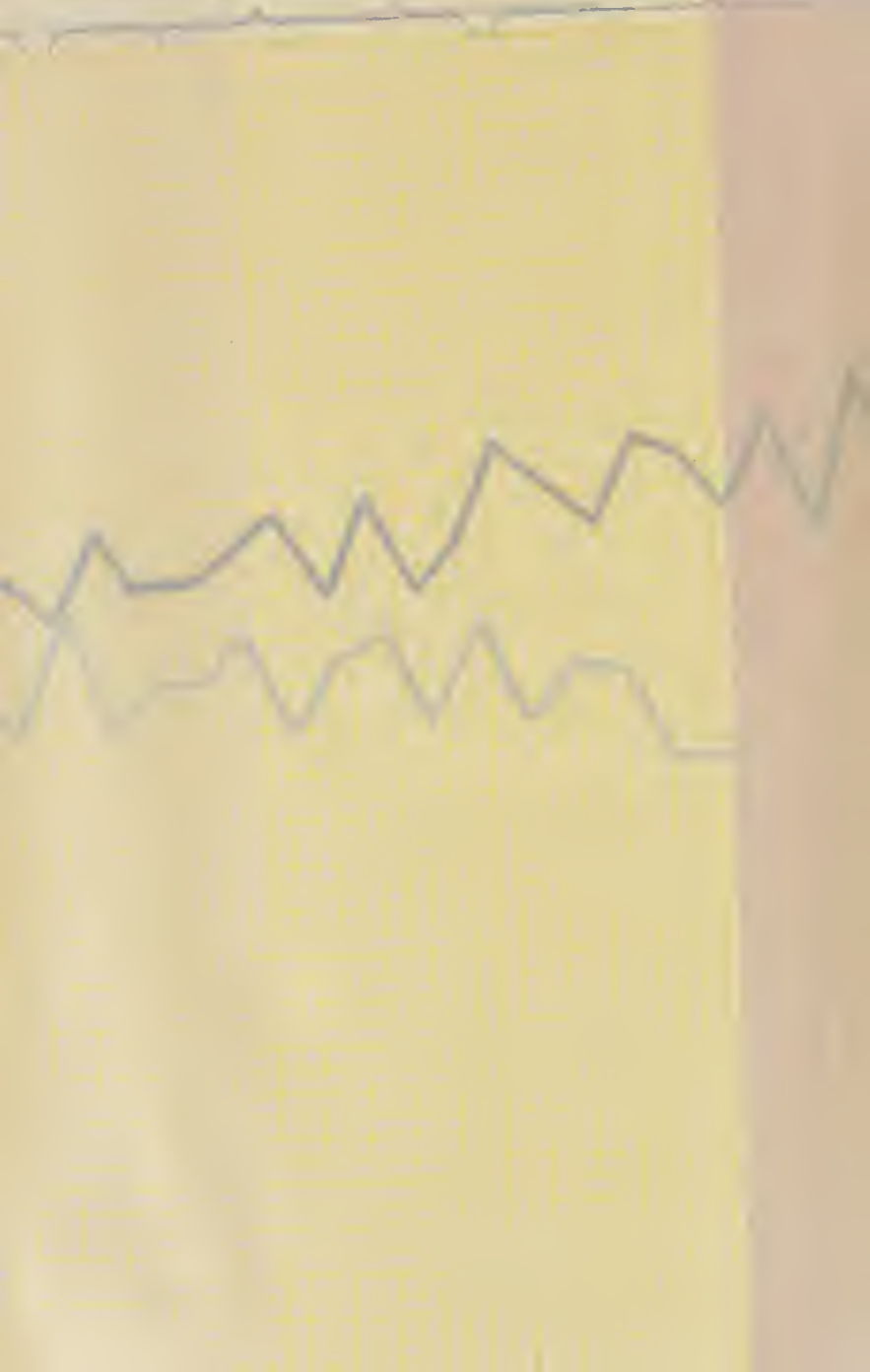


CITY

DEATH

(a) 21

1901-1910
1911-1920
1921-1930
1931-1940
1941-1950
1951-1960
1961-1970
1971-1980
1981-1990
1991-2000
2001-2010
2011-2020
2021-2030
2031-2040
2041-2050
2051-2060
2061-2070
2071-2080
2081-2090
2091-2100



INFANT MORTALITY

INFANT DEATHS (under 1 Year) PER 1000 BIRTHS

1891-1936

Average Infant Death-Rate
1891-1900

176

Average Infant Death-Rate
1901-1910

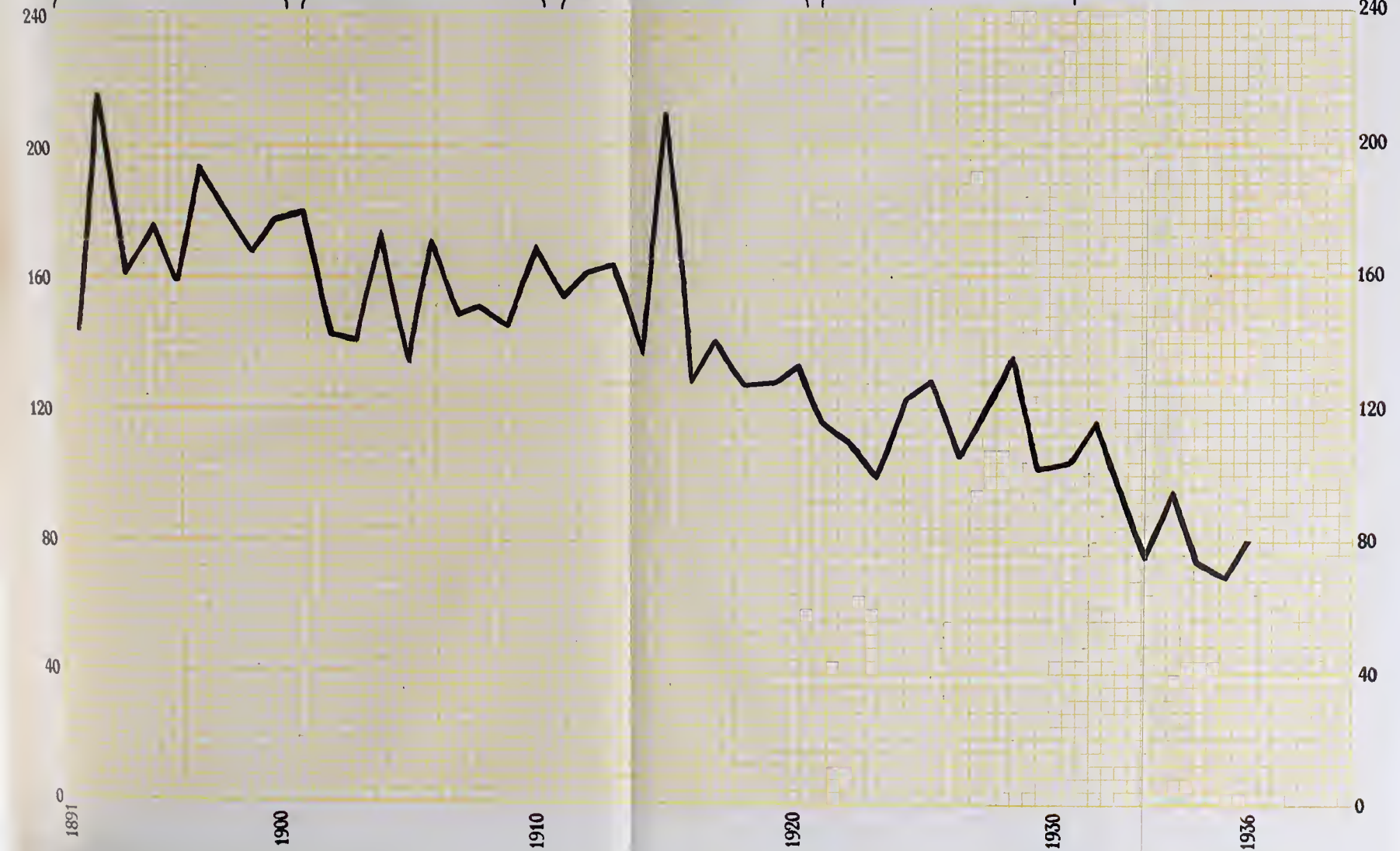
155

Average Infant Death-Rate
1911-1920

146

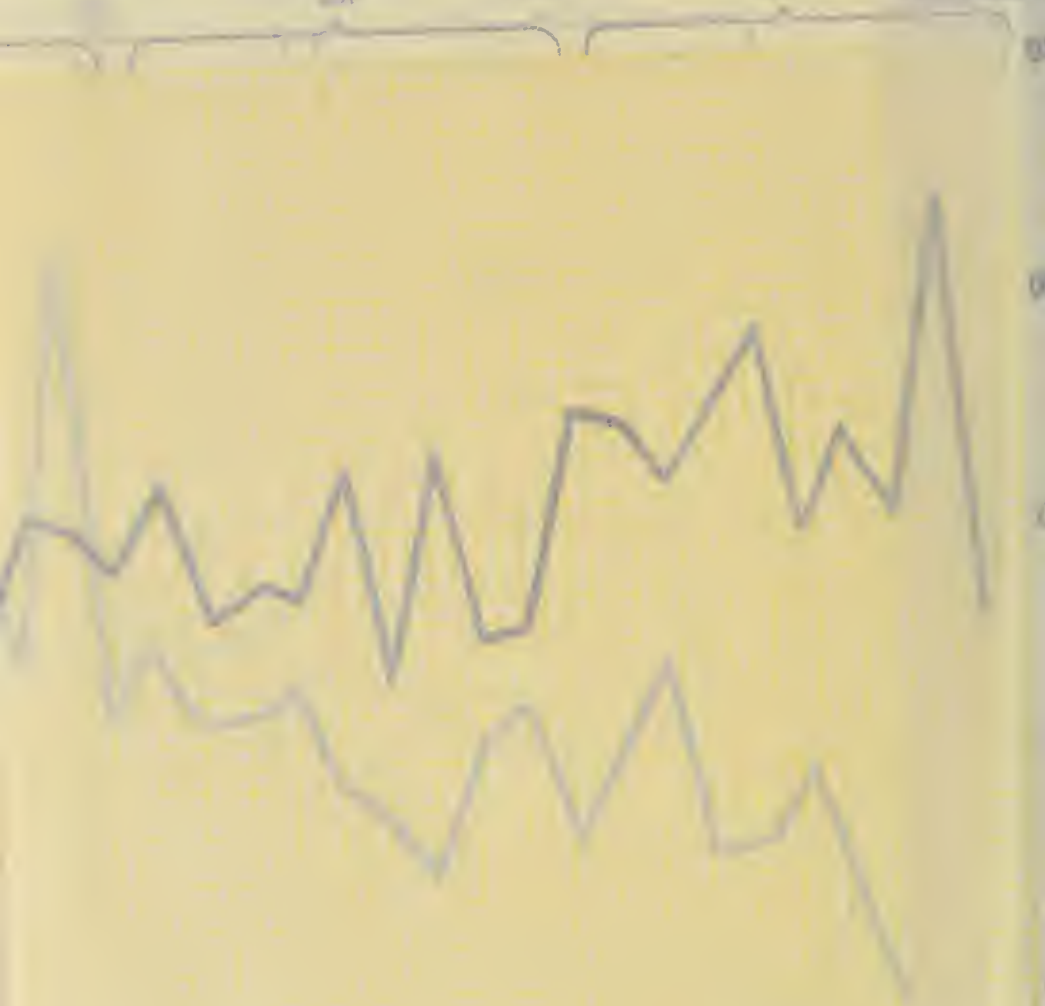
Average Infant Death-Rate
1921-1930

113

RATE PER
1000 BIRTHSRATE PER
1000 BIRTHS

8111 INBANT OBATHS

... ..



CITY OF DUNDEE

PULMONARY TUBERCULOSIS

3

DEATH RATE per 1000 Population

1891-1936

AVERAGE DEATH-RATE

1891-1900

2.26

AVERAGE DEATH-RATE

1901-1910

1.84

AVERAGE DEATH-RATE

1911-1920

1.34

AVERAGE DEATH-RATE

1921-1930

.87

RATE PER

1000

RATE PER

1000

3

3

2.5

2.5

2

2

1.5

1.5

1

1

.5

.5

0

0

1891

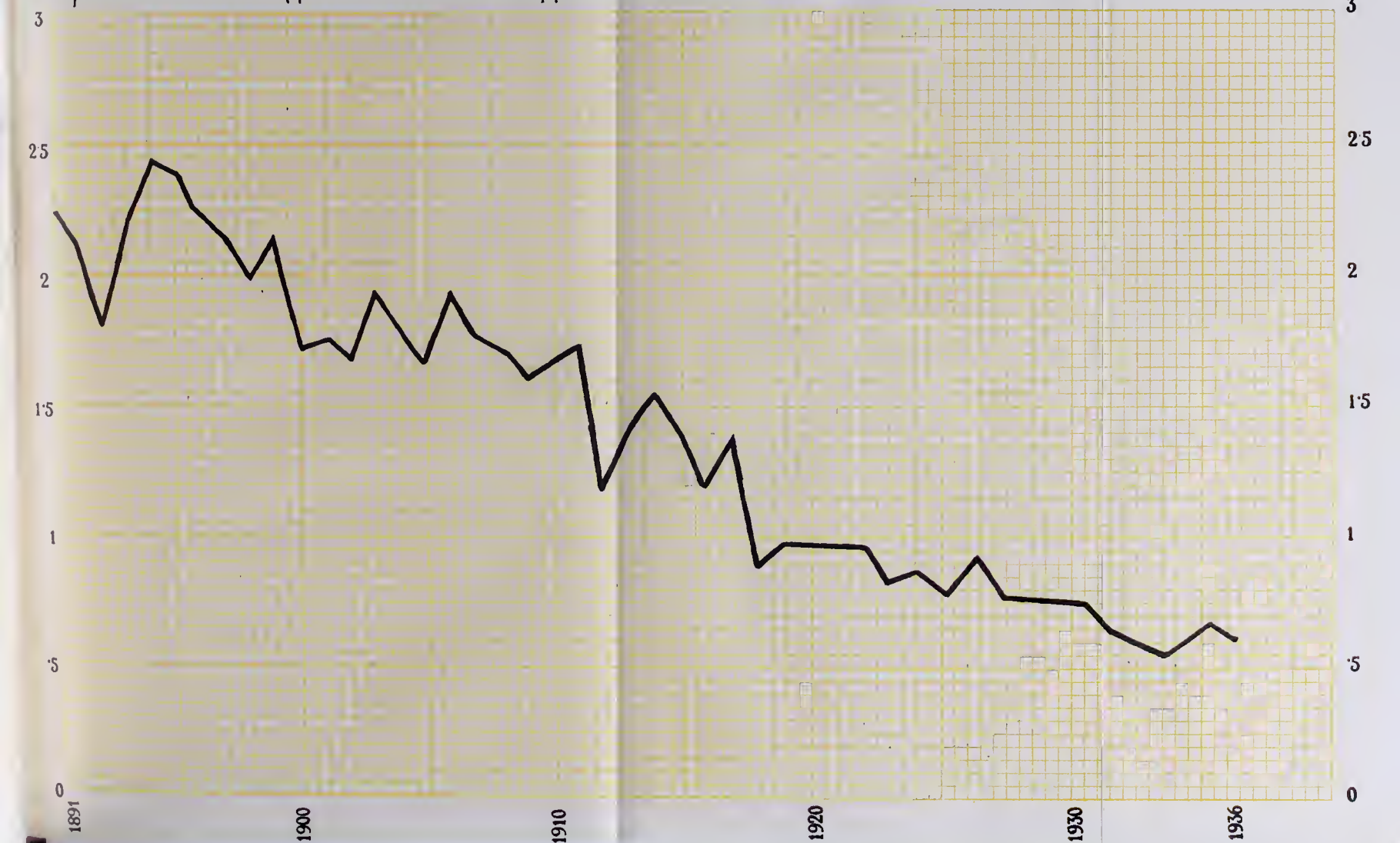
1900

1910

1920

1930

1936



CITY OF SIOUX FALLS

DEATH RATE
 1881
 AVERAGE DEATH RATE
 1881-1900
 1884

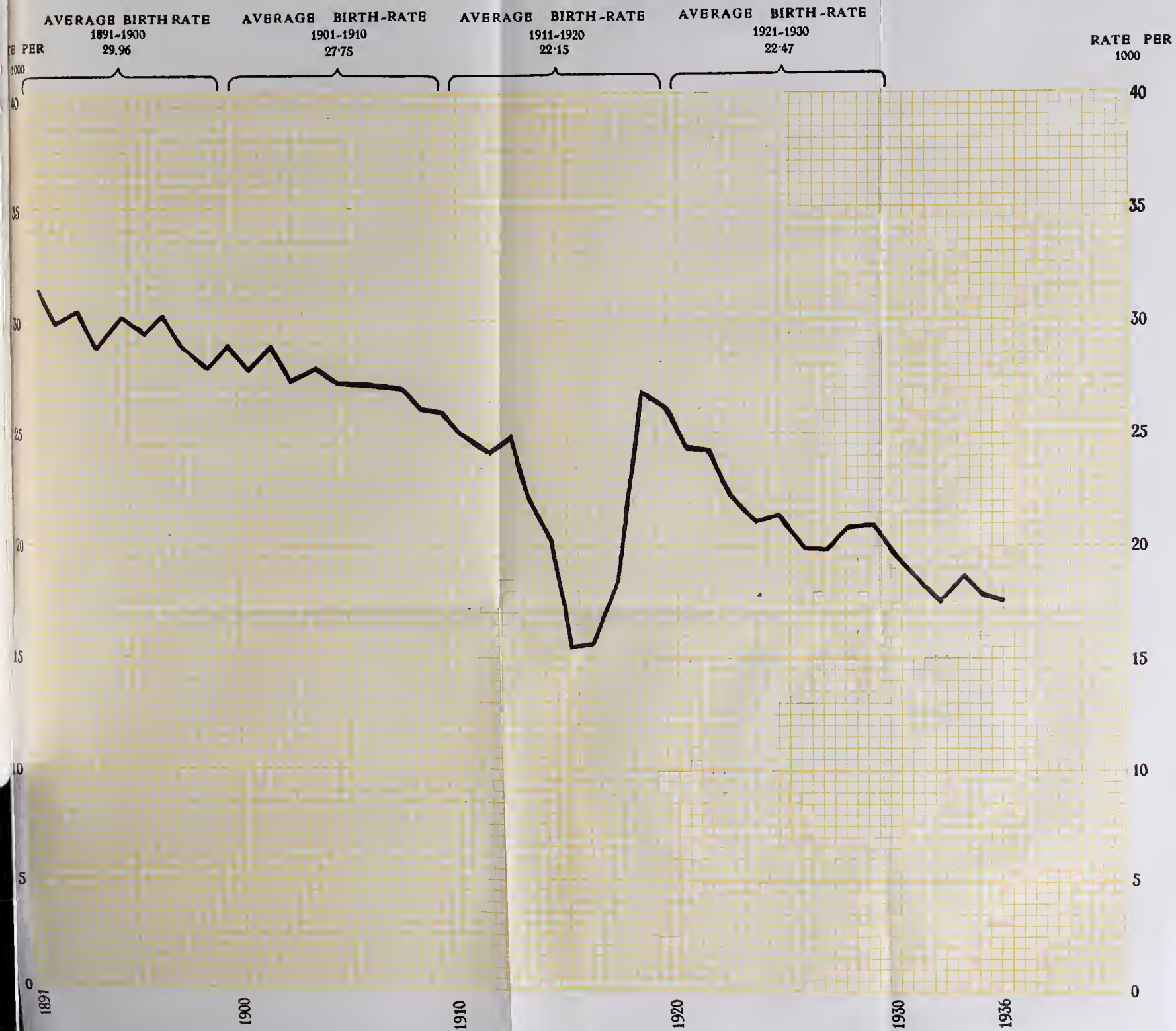


CITY OF DUNDEE

4

BIRTH RATE per 1000 Population

1891-1936





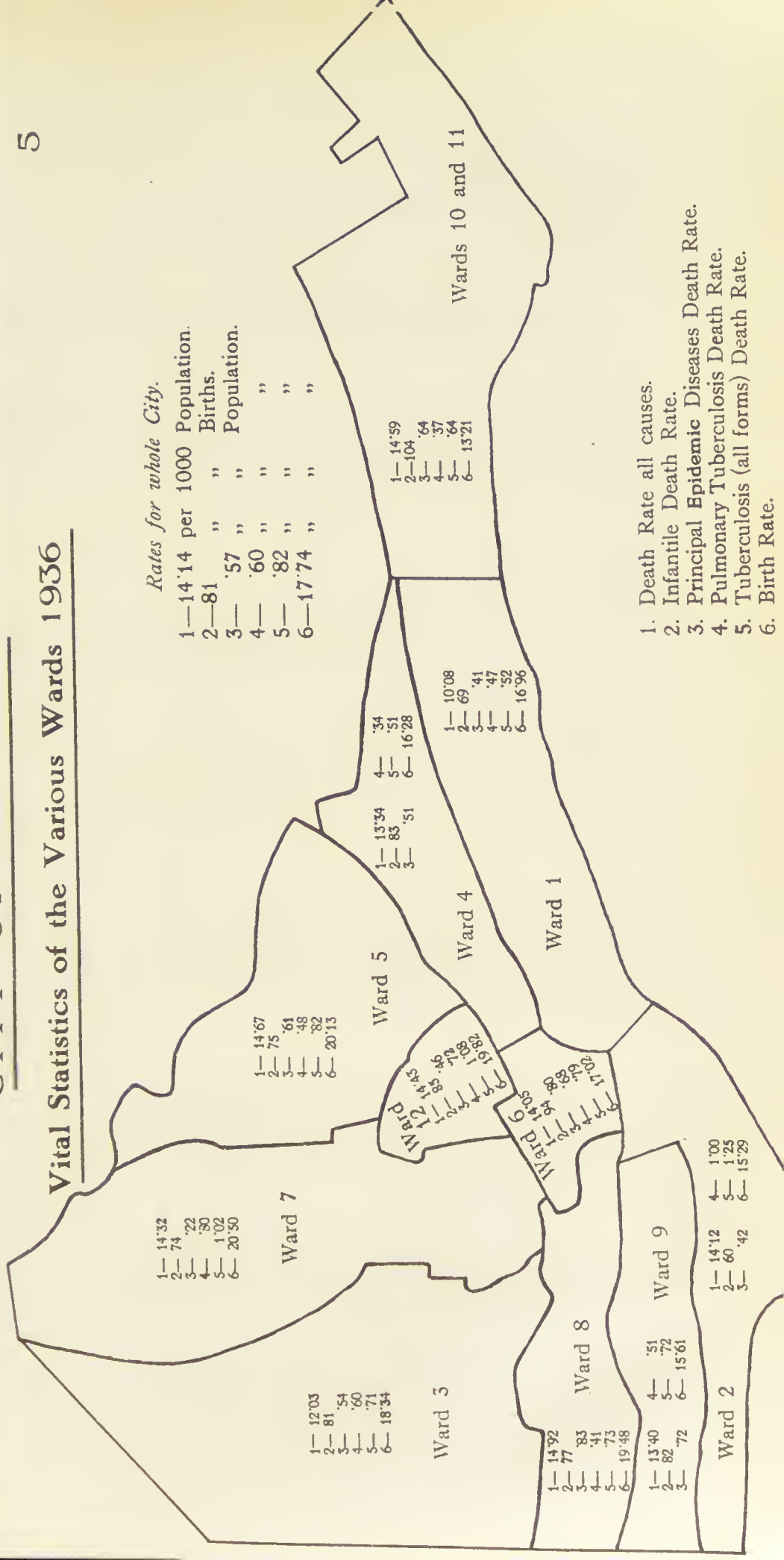
CITY OF DUNDEE.

Vital Statistics of the Various Wards 1936

5

Rates for whole City.

1—14	14	per 1000	Population.
2—81	"	"	Births.
3—57	"	"	Population.
4—60	"	"	"
5—82	"	"	"
6—17	74	"	"



KING'S CROSS HOSPITAL.

Report by DR. WM. ARMSTRONG DAVIDSON,
Senior Resident Medical Officer.

During the year under consideration, 1936, 1,766 patients were admitted to the hospital. The following table shows the numbers of all diseases according to the Notifications or Intimations.

Disease	In Hospital 31st Dec., 1935	Admitted during year.	Discharged during year.	Died during year	Remaining in Hospital on 31st Dec., 1936
Diphtheria and Membranous					
Croup,	46	310	328	6	22
Erysipelas,	4	104	88	14	6
Scarlet Fever,	36	242	235	4	39
Enteric Fever,	—	4	3	1	—
Measles,	—	402	369	32	1
Whooping Cough,	1	52	37	7	9
Chicken Pox,	7	13	20	—	—
Cerebro Spinal Fever,	2	13	7	8	—
Encephalitis Lethargica, ...	—	—	—	—	—
Ophthalmia Neonatorum, ...	1	15	12	1	3
Pneumonia, Lobar and					
Broncho,	13	285	272	22	4
Puerperal Fever,	2	84	76	4	6
Venereal Disease,	—	—	—	—	—
Dysentery,	2	72	72	2	—
Bronchitis,	3	87	83	4	3
Vulvo Vaginitis,	3	8	9	—	2
Gastro-Enteritis,	—	30	30	—	—
Scarlet Fever with Diphtheria	—	2	1	—	1
Scarlet Fever with Menin-					
gitis,	—	1	—	1	—
Scarlet Fever with Measles,	—	1	—	1	—
Scarlet Fever with Chicken					
Pox,	2	—	2	—	—
Scarlet Fever with Puerperal					
Pyrexia,	—	1	1	—	—
Scarlet Fever and Pneu-					
monia,	1	—	1	—	—
Measles with Whooping					
Cough,	—	1	1	—	—
Measles with Diphtheria, ...	—	2	2	—	—

Measles with Meningitis, ...	—	1	—	1	—
Erysipelas with Pneumonia,	—	1	—	1	—
Chickenpox with Pneumonia,	—	1	1	—	—
Gastro Enteritis with Pneumonia,	—	1	1	—	—
Anterior Poliomyelitis, ...	—	1	1	—	—
Influenza,	—	2	2	—	—
Mumps,	—	18	15	—	3
German Measles,	—	1	1	—	—
Tonsillitis,	—	1	1	—	—
Chill,	—	1	1	—	—
Food Poisoning,	—	1	1	—	—
Pemphigus,	—	3	3	—	—
Serum Disease,	—	1	1	—	—
Salpingitis,	—	1	1	—	—
Nephritis,	—	1	1	—	—
Healthy Infant,	—	2	2	—	—
Totals,	123	1,766	1,681	109	99

Average Duration of Stay,	21.45	days
Average Daily Number of Patients,	104.9	
Highest Daily Number of Patients,	183	Jan. 21
Lowest Daily Number of Patients,	48	Aug. 20
Number of Patient Days,	38,397	

There were 109 deaths, giving a hospital case mortality of 6.2%.

Scarlet Fever.

Of the 246 cases notified as Scarlet Fever or Scarlet Fever and an intercurrent disease discharged during the year, the diagnosis was confirmed in 218 cases. Amongst the 28 erroneously diagnosed, the following conditions were noted :—

Tonsillitis,	11	
Measles,	6	
Bronchitis,	2	
Pneumonia,	1	
Chicken Pox,	1	
Stomatitis, Thrush,	2	
Coryza,	1	
Teething,	1	
No Disease,	1	
Nephritis with Bronchiectasis,	1	Died
Acute Rheumatism c Streptococcal Septimæmia c Bronchitis,	1	Died

To the 218 cases in which the diagnosis was confirmed must be added 20 cases of Scarlet Fever notified as follows :—

Diphtheria,	14 (4 had double infection)
Measles,	1
Gastro Enteritis	1 (Double Infection)
Whooping Cough with Broncho Pneumonia	1 (Died) (Double infection)
Puerperal Pyrexia	1
K.L.B. Carrier	1
Nephritis	1

Thus the total becomes 238

Intercurrent infection occurred in 16, viz. :—

Diphtheria	4
K.L.B. Carrier	4
Vulvo Vaginitis with Diphtheria	1
Chicken Pox	3
Cerebro Spinal Fever	1 Died
Mumps	1
Osteomyelitis	1
Vulvo Vaginitis	1

There were 5 deaths giving a case mortality of 1.2%.

The ages of the fatal cases ranged from 1 to 3 years, and the causes of death were as follows :—

1. Septic type complicated by Myocarditis.
2. Septic type becoming Septicaemic.
3. Simple Scarlet Fever complicated by Nephritis.
4. Scarlet Fever and Cerebro Spinal Fever.
5. Scarlet Fever and Whooping Cough and Broncho
Pneumonia.

The following are the principal complications which were noted :—

Adenitis	20.24%	48 cases
Rhinitis (Purulent)	10.96%	26 ,,
Otorrhoea	7.17%	17 ,,
Nephritis	5.80%	14 ,,
Arthralgia and Arthritis ...	2.53%	6 ,,

Tonsils and adenoids were removed in 5 cases or 2.1%.

Mastoidectomy was performed in 1 case or 0.42%.

Relapse occurred in 5 cases or 2.1%.

Antitoxic Serum was administered to 36 cases or 15.3%.

Most of the cases were of the mild simple type of disease. There were, however, one of the toxic and five of the septic types, (three died). There was an increased incidence of Adenitis and Nephritis complicating Scarlet Fever during the year, compared with recent years. The occurrence of Nephritis was noted in 5.80% of cases (14) compared with 2.35% and 1.76% in the two preceding years.

On the whole other complications were less frequent. Therefore it would seem likely that the type of disease prevalent in 1936 was caused by certain strains of streptococci producing toxins with specially selective action on kidneys and glands.

Nephritis.

50% of the cases occurred in the age group 5-10 years, while the youngest patient was 1 and the oldest 28.

As would be expected the majority of cases (70%) occurred during the coldest seasons (October-February).

In 5 cases the diagnosis had been missed and these were admitted already suffering from Nephritis. All the others followed the Simplex Type of Scarlet Fever.

The average day of onset was the 16th of illness (varying from 6-26) and the average duration of stay in hospital 65 days.

In 4 cases cervical adenitis was also present.

Complete cure followed in 9 instances. 3 were discharged with mild recurrent albuminuria and one died (the youngest case in the series). One left against medical advice.

Diphtheria.

The diagnosis was confirmed in 182 of the 337 cases notified as suffering from diphtheria, or diphtheria with intercurrent infection and discharged during the year. Bacteriological evidence only was present in 26 cases who were regarded as carriers, and the remaining 129 were found to be suffering from other conditions, amongst which the following were noted:—

Acute Follicular Tonsillitis,	83
Scarlet Fever,	14
Bronchitis and Laryngitis,	5 (1 died)
Measles,	3
Foreign Body in Nose,	1
No Disease,	6

The addition of 4 cases of diphtheria erroneously diagnosed (broncho pneumonia—1, measles—1, measles with meningitis—1, gastro-enteritis—1), and of 4 cases who suffered from diphtheria in addition to the disease notified (scarlet fever) brings the total to 190 clinical cases.

Six of these patients had an intercurrent infection, namely, scarlet fever.

Five deaths were caused by diphtheria, making the case mortality 2.63%.

Fatal Cases.

Of the 5 deaths, three occurred in patients who first came under treatment on or after the fourth day of disease. One case died within six hours, another within three hours of admission, and in the latter case, tracheotomy had been performed in another institution. In no case was the Gravis Strain of organism recovered, and the clinical response to the administration of anti-toxin was satisfactory. The intravenous route is selected in all severe cases, being particularly useful for obtaining rapid effects as in cases of laryngeal diphtheria and in cases in which there is rapid spread of the infection.

The fatal cases were given an average of 36,000 units anti-toxin. In one of these two-thirds of the dose was given intraperitoneally, as the intravenous route was not practicable. The following particulars of the fatal cases may be of interest:—

	Infection	Age	Number of Days Ill	
			On Admission	At Death
1.	Faucial,	2½	4	14
2.	Faucial,	2 9/12	4	8
4.	Faucial, Laryngeal,	1 1/12	2 died in 3 hrs.	2
3.	Faucial and Nasal,	8½	5 died in 6 hrs.	5
5.	Laryngeal,	2 3/12	2	3

Types of Diseases.

	No. of Cases	No. of Deaths
Faucial,	140	2
Faucial and Laryngeal,	8	1
Faucial and Nasal,	20	1
Faucial, Nasal and Conjunctival,	1	—
Laryngeal,	7	1
Nasal,	14	—

Laryngeal Diphtheria.

In no case was surgical interference of any kind required.

Antitoxin Administered.

500—6,000 Units,	53 cases—or 27.9%
6,000—10,000 Units,	47 cases—or 25.0%
10,000—20,000 Units,	49 cases—or 25.7%
20,000—30,000 Units,	18 cases—or 9.4%
30,000—50,000 Units,	18 cases—or 9.4%
Over 50,000,	5 cases—or 2.6%

190

Comment.—Negative results from swabbing do not preclude diphtheria, and the hospital is prepared to admit at any time for observation and treatment any case in which there is reasonable suspicion of diphtheria.

Post-Partum and Post-Abortum Infection.

The diagnosis of post-partum or post-abortum infection was confirmed in 60 of the patients so notified, discharged during the year. The corrected diagnosis in the remaining 21 cases was:—

Mastitis,	5
Incomplete Abortion,	4
Urinary Infection,	6
Thrombo Phlebitis,	2
Scarlet Fever,	2
Post-Partum Eclampsia,	1
No Disease,	1

Four of the accepted cases died, making the total case mortality 6.6%.

Source of Infection.

Classified according to the place of confinement or abortion.

In the patient's home in Dundee,	23 cases
In Institutions in Dundee,	25 „
In the patient's home outwith Dundee, ...	11 „
In Institutions outwith Dundee,	1 „

Post-Partum Infection.

There were 54 cases, of whom 3 died. The age of mother :—

Age in Years,	15—19	20—29	30—39	40+	Totals
Recovered,	1	35	14	1	51
Died,	—	2	1	—	3
Totals,	1	37	15	1	54

Hospital Death Rate—5.5%.

Number of Confinements.

1st Confinement,	22 cases or 40.8%
2nd, 3rd or 4th Confinement, ...	19 cases or 35.1%
5th or more Confinement,	13 cases or 24.1%
<hr/>	
	54 cases

In six cases the mother was unmarried.

Stay in Hospital.

The average stay in hospital of those who recovered was 30.4 days. The longest stay was 74 days and the shortest 14 days.

Of those who died, the average duration in hospital was 5.3 days, the longest 8 days and the shortest 3 days.

Nature of the Confinement.

Normal Confinement,	26
Instrumental Delivery,	12
Retained Products of Conception,	5
Prolonged Labour,	4
Abnormal Presentation,	3
Placenta Prævia,	2
Post-Partum Hæmorrhage,	1
B.B.A.,	1
<hr/>	
Total,	54

Damage to Soft Parts.

In 37 cases (68%) there was some degree of damage to the birth canal. Cervical laceration occurred along with perineal damage in 19 of these cases.

Clinical Types of Infection.

Group 1.—In which the infective process was localised in the uterus and/or external genitalia. There were 50 of these cases and 48 recovered. Case mortality, 4%.

The results of bacteriological investigation of uterine cultures were as follows :—

Hæmolytic Streptococci,	12
Hæmolytic Streptococci and other organisms,	6
Non-Hæmolytic Streptococci,	4
Non-Hæmolytic Streptococci and other organisms (Colon Bacilli, Staphylococci, etc),	7
B. Coli, Staphylococci, etc.	19
No Growth,	2

Transfusion of blood was performed in one case of severe secondary anæmia. Particulars of the two fatal cases :—

1.—This patient was admitted from her own home in a shocked and toxic condition after a prolonged labour the preceding day. Death occurred in three days and non-hæmolytic streptococci were recovered from the uterus.

2.—Uterine infection with hæmolytic streptococci present on admission. Delivery had been instrumental with perineal laceration. Toxic jaundice developed and the patient died eight days after admission.

Group 2.—In which the infection spread through or beyond the uterus to the appendages, cellular tissues, or peritoneum, but which remained non-septicæmic.

There were 2 of these cases and both recovered.

The results of bacteriological investigation of uterine cultures were :—

Non-Hæmolytic Streptococci,	1
Non-Hæmolytic Streptococci and other organisms, ...	1
Curettage of the uterus was required in one case.	

Group 3.—In which the blood stream became infected. There were two of these cases, one of which recovered, and from the blood culture, hæmolytic streptococci were obtained.

1.—The fatal case was admitted from another institution on the 4th day of the puerperium, having had symptoms of infection for three days. B. Coli were recovered from the uterus, but it is probable that there was a streptococcal blood infection. The

labour was difficult and prolonged. After an intra partum hæmorrhage, then episiotomy, the child was delivered with forceps. The placenta was manually removed. Death occurred five days after admission to hospital.

Summary of the Bacteriological Findings in the Three Groups.

Hæmolytic Streptococci,	13
Hæmolytic Streptococci and other organisms,	6
Non-Hæmolytic Streptococci,	5
Non-Hæmolytic Streptococci and other organisms,	8
Staphylococci, B. Coli, etc.,	20
No Growth,	2
	—
	54

Post-Abortum Infection.

Ten cases admitted with this diagnosis were discharged during the year. The diagnosis was confirmed in 6 cases, of whom 5 recovered.

Bacteriological findings were as follows:—

Non-Hæmolytic Streptococci and other organisms,	2
Colon Bacilli,	4
	—
	6

The fatal case of post-abortum sepsis was badly complicated by the development of broncho pneumonia, with pleural effusion, toxic myocarditis and urinary infection. The patient had been ill four days before admission. The infection was non-hæmolytic streptococci and staphylococci.

Urinary infection was present in 21 of the 60 cases.

During the year there was a slight increase in the number of cases of this nature. In addition to the routine methods of treatment, the new chemo-therapy of hæmolytic streptococcal infections has been employed in a number of cases.

Measles.

The expected biannual epidemic of measles occurred in the spring of this year, and 26% of the total admissions to hospital were due to this cause.

The diagnosis was confirmed in 380 cases out of 406 intimated as measles or measles and an intercurrent disease.

To this total must be added 13 cases notified as :—

Scarlet Fever,	6
Diphtheria,	3
Bronchitis, Broncho Pneumonia,	3
Whooping Cough,	1

. This bringing the total to 393 cases.

Among the 26 cases erroneously diagnosed as measles were found the following conditions :—

Scarlet Fever,	1
Blepharitis,	2
Bronchitis and Broncho Pneumonia,	11
Acute Rheumatism, Bronchitis, Streptococcal Septicæmia,	1 (died)
No Disease,	4

There were 32 deaths in the series so that the case mortality was 8.1%.

80% of the deaths occurred in children under 2 years, and broncho pneumonia occurred as a complication in 96% of the fatal cases.

Cancrum oris was noted in one fatal case.

Dysentery.

Over 70 cases of this disease were treated in Hospital during the year compared with 13, 42 and 5 in the three preceding years.

Such an increase justifies some comment.

74 patients who were admitted with a diagnosis of dysentery were discharged in 1936, and of them 46 were accepted. By adding 3 cases—admitted as gastro enteritis 1, mumps 1 (double infection), erysipelas 1 (double infection)—the total becomes 49.

Bacteriological examination of stools was made in all cases, and when necessary serological examination.

This showed that every case was of the bacillary type, and infections with Flexners (unclassified), Flexner W, X, Z and various combinations of Flexner V, W, X, Y and Z were proved. In only one case was B.Sonne III. recovered.

The majority of the cases were mild and only three were given serum.

No gross family outbreaks occurred apart from three children of one family who were admitted, of whom one died.

The incidence of dysentery was lowest for the first three months of the year and for June (no case), July and August.

Peaks occurred during April/May and September/October.

60% of the cases were among children between 1-5 years; 15% under one year.

Duration of stay in hospital—Under 14 days, 20; 14-28 days, 27; over 28 days, 2.

There were 3 deaths, and in them all concurrent infections contributed to the end result. Mortality rate, 6.1%.

Time of Year	Age	Type	Days Ill		Concurrent Infection	Serum
			On Admission	At Death		
1. Sept.	2 3/12	Flexner W.	4	12	Lobar Pneumonia	Given
2. Oct.	22	Unclassified Bacillary	2+	17	Erysipelas Broncho Pneumonia Mastoidectomy	Given
3. Dec.	6 weeks	Unclassified Flexner	6	8	Bronchitis	None

The following conditions were found in the 28 cases in whom the diagnosis was not accepted:—

Gastro Enteritis (Non-Specific)

Enteritis, 21

Entero-Colitis

Influenza, 3

Broncho Pneumonia, 1

No Disease, 3

Total, 28

Surgery.

There were 21 operations under general anæsthesia performed in the theatre during the year. These were:—

Empyema,	6
Tonsils and Adenoids,	5
Dissection of Tonsils,	3
Mastitis,	4
Dilatation and Curettage,	2
Schwartz's Mastoidectomy,	1
	<hr/>
	21

Blood transfusion was performed for two cases.

(Signed) WM. ARMSTRONG DAVIDSON,
Senior Resident Medical Officer.

TUBERCULOSIS.

Report by Dr J. H. HUNTER,
Chief Tuberculosis Medical Officer.

During the year 1936, the routine work of the Tuberculosis Section proceeded on the same lines as in previous years. Again I desire to acknowledge the very valuable assistance rendered by all members of the staffs of this section of the Public Health Institute and Ashludie Sanatorium, the medical officers and staffs of the various Public Health Services, the health visitors, the Public Assistance Committee and the Unemployment Assistance Board, the Royal Infirmary and other institutions interested in this work, whose co-operation has greatly assisted the furtherance of our work.

The notifications for the year show a decrease on the previous year's figures of 53, of which 19 are males and 34 are females, 33 are pulmonary and 20 are non-pulmonary. The greatest reduction in the pulmonary type is in female age groups 5-15 and 25-45, whereas in the non-pulmonary, the greatest reduction is in the gland type, but is distributed equally over all age groups in both sexes.

The attendances at the various clinics show a general increase and the work was satisfactorily carried out.

The accommodation at Ashludie Sanatorium has become a matter of grave concern. This accommodation is based on the needs for the treatment of pulmonary tuberculosis and the provision is adequate for that purpose alone, but now the ever increasing demand for accommodation for non-pulmonary tuberculosis has resulted in a definite shortage in the beds available for the pulmonary cases. In addition there is the factor, and a very important point, that the non-pulmonary case requires a prolonged period of treatment, anything from eighteen months to three years, according to type, and a bed occupied by a non-pulmonary case may be looked on as unavailable for further cases for a very long term, with the consequence that the waiting period before admission is unduly prolonged and much valuable time is lost; it may mean the chance of recovery impaired, and certainly means a more prolonged residence in the Sanatorium.

The question also arises of treatment of tuberculous children from 15 years for which no provision is made under our scheme, other than six cots accommodated in the day room attached to Ward 1. The convalescent patients of Ward I, for whom the day room was originally intended, are meantime denied the use of this room as a recreation and dining room. The number of additional beds required is a matter which must be carefully considered from the point of view of future needs, but for immediate needs I would suggest accommodation for a further 40 cases.

The appointment of a visiting surgeon should now be considered. With the increase in the admissions of non-pulmonary or surgical tuberculosis, I would propose that a surgeon be appointed to the visiting staff, who will pay regular visits and perform all the necessary surgical work at the Institution at an inclusive fee

I greatly appreciate the work done for children in Sidlaw Sanatorium and tender my thanks to the Medical Officer, Matron and Staff for their valuable co-operation. I visited the Sanatorium several times during the year and always found the children happy, well cared for and greatly benefited by their stay in the Institution.

In the year 1936, 341 cases of tuberculosis were notified—232 cases of pulmonary tuberculosis and 109 cases of non-pulmonary tuberculosis. Of these :—

133 cases were discovered at the Tuberculosis Section.

63 cases were notified by private practitioners.

6 cases were notified from Maryfield Hospital.

105 notifications came from the Royal Infirmary.

1 notification came from the Infant Hospital, Broughty Ferry.

4 notifications came from the Convalescent Home, Barnhill.

8 notifications came from Medical Officers outside the city.

16 came under the notice of the Department through the Registrar after death had taken place.

Pulmonary Tuberculosis.

During the year 232 cases of pulmonary tuberculosis were notified. The age and sex of these were as follows :—

Age.		Males.	Females.	Total.
Under 1 year	...	—	—	—
1- 5 years	...	6	3	9
5-15 ,,	...	27	23	50
15-25 ,,	...	27	38	65
25-45 ,,	...	49	31	80
45-65 ,,	...	14	11	25
65 years and upwards	...	—	3	3
	...	123	109	232

The following are the particulars as regards housing :—

No. of Rooms.	No. of Cases.	Total No. of Inmates.	No. of Inmates per Room.
1	36	138	3.83
2	87	395	2.27
3	60	357	1.98
4 and upwards	19	88	1.15

In 30 cases home conditions were satisfactory.

Non-Pulmonary Tuberculosis.

During the year 109 cases of non-pulmonary tuberculosis were notified. The age and sex of these were as follows :—

Age.		Males.	Females.	Total.
Under 1 year	...	2	2	4
1- 5 years	...	17	10	27
5-15 ,,	...	23	10	33
15-25 ,,	...	9	11	20
25-45 ,,	...	5	14	19
45-65 ,,	...	3	1	4
65 years and upwards	...	1	1	2
		60	49	109

The sites of the disease were as follows :—

	Under 1 year.		1-5 years.		5-15 years.		15-25 years.		25-45 years.		45-65 years.		65 years & upwards.		Total	
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
Meninges	1	1	4	5	4	1	3	2	0	1	1	0	0	0	13	10
Abdomen	0	0	7	1	7	4	1	5	0	5	0	0	0	0	15	15
Glands	1	0	2	3	5	1	1	1	0	5	0	0	0	0	9	10
Bones, Joints	0	0	1	1	1	3	2	2	1	1	1	0	1	0	7	7
Spine	0	0	0	0	2	0	0	1	1	0	1	1	0	0	4	2
Other Forms	0	1	3	0	4	1	2	0	3	2	0	0	0	1	12	5
Totals	2	2	17	10	23	10	9	11	5	14	3	1	1	1	60	49

The following are the particulars as regards the housing of the non-pulmonary cases :—

No. of Rooms	No. of Cases.	Total No. of Inmates.	No. of Inmates per Room.
1	...	18	62
2	...	33	184
3	...	23	118
4 and upwards	7	46	1.64

In 28 cases the home conditions were satisfactory.

Tuberculosis Clinic.

During the year 434 cases were enrolled as compared with 392 in the year 1935. Of these 88 were found to be suffering from distinct phthisis, (53 males and 35 females) ; 29 were found not to have the disease ; in 284 cases the signs were somewhat indefinite but these cases were regarded as the " pre-tuberculosis stage " ; and 33 were found to be suffering from other forms of tuberculosis.

There were 283 contacts examined ; 3 were found to be suffering from pulmonary tuberculosis ; 2 were found to be suffering from other forms of tuberculosis ; 103 were suspicious and are being kept under observation, and the remaining 175 were found to be negative.

Of the 88 cases of definite phthisis, 22 were previously notified and 66 were notified from the clinic for the first time.

The age and sex of these were as follows :—

Age.	Males.	Females.	Total.
Under 1 year	...	—	—
1- 5 years	...	1	1
5-15 ,,	...	11	6
15-25 ,,	...	18	18
25-45 ,,	..	20	9
45-65 ,,	..	3	2
65 years and up ward	—	—	—
	53	35	88

The attendances at the tuberculosis clinic were as follows :—

	Insured.	Non-Insured.	Total.
January	525	364	889
February	564	368	932
March	615	373	988
April	557	287	844
May	527	216	743
June	521	260	781
July	449	160	609
August	465	230	695
September	531	248	779
October	521	288	809
November . . .	498	249	747
December . . .	440	231	671
	<hr/> 6213	<hr/> 3274	<hr/> 9487

Artificial Sunlight.

During 1936, 158 patients attended the artificial sunlight clinic. Of these, 88 were males and 70 were females.

	Males.	Females.	Total.
No of Attendances	3,539	2,907	6,446
No of Sessions—293.			

Laboratory Work.

During the year, 423 specimens of sputum were examined, with the following results :—

	Positive.	Negative.
132 for general practitioners	29	103
291 for clinic patients	47	244

X-Ray Department.

During 1936, 477 radiograms and 588 screen examinations were carried out.

Of the 477 radiograms :—

448 were for the Tuberculosis Section.

24 were for Maryfield Hospital.

5 were for the V.D. Section.

Chest	Other Parts	Total
462	15	477

Artificial Pneumothorax

During the year there were 144 attendances at the Pneumothorax Clinic. Of these 103 were males and 41 were females.

Sidlaw Sanatorium.

During the year there were altogether 48 cases from the City recommended for treatment in this Institution. 25 of these were males and 23 were females. There were 59 cases discharged (24 males and 35 females). Average stay in the Institution—198 days.

The following table shows the result of the treatment in these cases :—

Improved	No Improvement
34	25

J. H. HUNTER, M.B., D.P.H.
Chief Tuberculosis Officer.

ASHLUDIE SANATORIUM.

Report by Dr G. WALKER.

During the year 173 patients were admitted and 169 discharged, including 42 who died. The following are the relevant details :—

Admissions—	Males	Females	Children under 12	Total
Tuberculosis of Lungs and Pleura	63	63	4	130
Non-Pulmonary Tuberculosis, ...	8	14	1	23
Non-Tuberculous,	6	14	—	20
Discharges,	56	68	3	127
Deaths,	19	21	2	42

Number of beds occupied on December 31st, 1936,	123
Highest daily number of patients,	129
Lowest daily number of patients,	115
Average daily number of patients,	123
Average residence of those discharged,	244 days
Average residence of those who died,	263 days

Age and Sex Distribution of Admissions.

Age	Pulmonary		Glandular		Bone and Joint		Other Forms		Non-Tuber- culous	Total
	M.	F.	M.	F.	M.	F.	M.	F.		
0—5,	1	—	—	—	—	1	—	—	—	2
5—15,	2	7	1	1	—	—	—	1	1	13
15—25,	21	32	—	2	3	3	1	1	4	67
25—35,	19	14	—	2	1	1	—	2	6	45
35—45,	18	9	—	—	1	—	1	—	8	37
45—60,	3	3	—	—	—	1	—	—	1	8
Over 60,	—	1	—	—	—	—	—	—	—	1

Condition on Discharge.

	Males	Females	Children
Quiescent,	4	4	1
Much Improved,	24	20	2
Improved,	16	18	—
Unimproved,	6	7	—
Worse,	3	7	—

	Males	Females	Children
Died,	19	21	2
Non-Tuberculous,	3	12	—
	<hr/>	<hr/>	<hr/>
	75	89	5

Admissions—Pulmonary.

Cases of tuberculosis of the lungs and pleura form the majority of the admissions, and the usual variety in extent of the disease is noted. The age and sex distribution of admissions reflects to some extent the incidence of the disease, and shows that the young adult female group, yielding the largest number of admissions, still constitutes an unsolved problem in epidemiology. The physiological stresses of puberty and adolescence, along with unfavourable environmental conditions, help to maintain the high incidence and death rate in this age group.

Of 99 cases admitted for the first time, 21 were suitable for active treatment directed against the local lesion, 35 were not requiring such treatment, and 43 were unsuitable on account of the type or extent of the lung disease. Although this represents an improvement on last year's figures, maximal efficiency will result only when new cases can be brought under treatment immediately they are discovered. A few weeks spent awaiting admission may decide whether a patient can be successfully treated or not. The ideal of immediate admission cannot be attained with the existing number of beds until some arrangement is made for the transfer of patients, who, after complete investigation are assessed as unsuitable for active treatment but require hospitalisation for other reasons.

Pleurisy with effusion accounted for 12 admissions as against 7 last year. This is an encouraging increase as adequate treatment of this condition is a good insurance against future pulmonary tuberculosis, but we still admit patients with widespread disease who give a history of pleural effusion some years before and sanatorium treatment was not recommended until the pulmonary disease was beyond treatment.

The above figure does not include one case admitted with pleural effusion and found to have sputum positive for T.B.

Non-Pulmonary.

Twenty-three cases of non-pulmonary tuberculosis were admitted, including three of spinal caries, making a total of eleven cases of spinal caries under treatment at the end of the year.

Non-Tuberculous.

These were patients admitted for investigation and diagnosis, and included 2 cases of bronchiectasis, 2 of hypochromatic anæmia, 1 each of neurosyphilis, chronic nephritis, mitral stenosis, and primary bronchial carcinoma. In two cases no disease was found.

Discharges and Deaths.

During the year 42 patients died, 18 within three months of admission. The shortest residence prior to death was 7 days. The cause of death was as follows:—

Pulmonary Tuberculosis,	37 cases
Pulmonary and Renal Tuberculosis,	1 case
Tuberculosis of Spine,	1 „
Multiple Tuberculous Lesions,	1 „
Bronchial Carcinoma (autopsy),	1 „
Chronic Nephritis, Uræmia,	1 „

In 15 cases no evidence of tuberculosis was found, and they were discharged after investigation.

Treatment—Pulmonary.

Treatment of pulmonary cases followed the usual lines, and no new remedy was introduced during the year. Every opportunity was taken to give patients the advantage of pneumothorax treatment which is still the most valuable procedure as a supplement to sanatorium regime.

Artificial pneumothorax was attempted in 24 cases, in five of which no space was found. Of the remaining 19 who are still under treatment, 11 are males and 8 females. In two cases where the disease was bilateral, intravenous injections of a gold salt were given with good results.

Phrenic avulsion was performed in 20 cases, either in conjunction with artificial pneumothorax or as an independent operation in certain cases where improvement under sanatorium treatment had ceased and attempts at healing made by the lung had resulted in mediastinal distortion and displacement. These cases showed a very satisfactory response although improvement was not dramatic but rather slow and steady over a period of months.

A course of tuberculin injections was given to 14 cases, and intravenous injections of a gold salt to 5 cases.

Non-Pulmonary.

Conservative treatment was favoured in these cases, usually supplemented by tuberculin, either by injection or inunction.

Operating Theatre.

A number of new instruments have been added during the year, chiefly for thoracic and bone surgery.

Including pneumothorax refills, 827 operations under local and 5 under general anæsthesia were carried out. In addition, intravenous pyelography was done in 3 cases, and lipiodol injection through the cricothyroid membrane in 2 cases for diagnosis.

X-Rays.

1,115 screen examinations were made and 598 films taken. The latter includes 465 films of the chest and 133 of bones, joints and kidneys.

Training for Nurses.

One nurse completed the examination for the certificate of the Tuberculosis Association, and four passed in Part 1. subjects.

Recreation.

A new tennis court has been laid down and is a valuable asset for the recreation of the staff.

DUNDEE MENTAL HOSPITAL.

REPORT by Dr W. TUACH MACKENZIE,
Medical Superintendent.

The number of patients on the Hospital Registers was, on 15th May, 1936—610 (305 men and 305 women), and on 15th May, 1937—626 (320 men and 306 women).

During the year there were 96 admissions, 46 discharges and 34 deaths. The total number under treatment was 706 (349 males and 357 females), and the average daily number 619.2 (314.2 males and 305 females), the corresponding figure for the previous year being 617.7 (308.1 males and 309.6 females).

The Service Patients maintained by the Ministry of Pensions as Private Patients numbered 21 at the beginning, and at the end of the year 20.

There is one voluntary female patient resident. A male voluntary patient left during the year, having recovered.

The rate-aided patients are chargeable as follows:—

	Male	Female	Total
City of Dundee	315	301	614
County of Angus, ...	4	2	6
Other Districts,	3	3	6
	<hr/>	<hr/>	<hr/>
	320	306	626

Admissions.

The types of mental disorder among the admissions comprised chiefly the constitutional psychoses, e.g., melancholia in 18 cases in whom 4 cases exhibited active suicidal tendencies, dementia and schizophrenia 7, delusional psychoses 22, mania 13, confusional and delirious psychoses 15, the organic psychoses in 6 cases, neurasthenia in one case. The congenital psychoses were represented by 9 mental defectives with active psychotic symptoms.

At the time of admission their bodily health was good in 2 cases, average in 6, fair but below par in 74 cases, poor in 11, and weak in 3 cases.

Discharges.

The cases discharged numbered 46 (21 men and 25 women), of whom 41 were recovered, 4 improved and one unimproved, the recovery rate being 42.7% of the number admitted and in addition 4.2% being improved, or in all 46% had regained their health more or less completely.

Deaths.

Thirty-four patients died during the year (8 men and 26 women)—the death rate for the year calculated on the average number resident was 55.

The deaths were all due to natural causes, which were verified by post-mortem examination in every case in which the relatives granted permission.

Diseases of the heart and circulation were found to be the cause of death in 4 cases, disease of the brain and nervous system in 3 cases, acute diseases of the lungs in 16 cases, phthisis pulmonalis and other tubercular diseases in 5 cases, carcinoma 2 cases, septicæmia 2 cases, epilepsy 1, and cellulitis of pelvic peritoneum 1 case.

Of the patients who died 2 were from 12 to 20 years of age; 4 from 20 to 30; 1 from 30 to 40; 3 from 40 to 50; 6 from 50 to 60; 9 from 60 to 70; 8 from 70 to 80; and 1 from 80 to 90.

WM. TUACH MACKENZIE,
Medical Superintendent.

DENTIST'S REPORT

I have much pleasure in submitting to you my report of Dental Treatment carried out by me at Westgreen Mental Hospital for the year to 31st December, 1936.

I made 50 visits to the institution during the year and carried out the following treatment :—

Extractions—

With Local Anæsthetic,	315 Teeth
Fillings,	9 Teeth
Scalings and Cleanings,	231 Cases
Gum Treatments,	23 Cases
Silver Nitrate Treatment (to arrest dental caries), ...	48 Teeth Treated

One female patient who is allowed to wear her artificial teeth had her upper denture remade at her relations' request and expense.

One female and one male patient had repairs to their dentures.

The mouths of the patients were examined twice during the year, and as usual encouraged to use their tooth brushes.

It might be of interest to state that patients on admission to the institution who have teeth in situ all require dental treatment.

I would again take this opportunity of thanking the Medical Superintendent and his staff for their kind help during my visits to the institution.

(Signed) FRANK BERRY WHYTE,
L.D.S., St. Ands.

CHAPLAIN'S REPORT

Dear Dr Tuach Mackenzie,

I have the honour to submit my report for the year 1936-37.

The service in church on Sunday afternoon has been held regularly throughout the year, and would appear to be appreciated by the majority of those attending. Their demeanour is on the whole very good, and the musical part of the service seems to make a special appeal. My thanks are due to Mr Adams and Mr Chalmers for their great help in this respect, as also to the staff generally for their kindly care in the arrangements.

The weekly visits to the Admission and Hospital Wards have been continued, and short services have been held there for those who cannot attend the church.

May I again express my gratitude to yourself and to your staff for the ready help that has always been afforded me.

Yours faithfully,

(Signed) J. MACLEAN, Chaplain.

MARYFIELD HOSPITAL.

REPORT BY Dr J. B. MACDONALD,

Medical Officer

During 1936 Maryfield Hospital continued its work as a municipal general hospital, and the appreciable strain thrown on the surgical, medical and nursing staffs as a result of the new status and scope of the Hospital was met by a fine spirit of co-operation and goodwill.

The increased demand made on our visiting specialists is an indication of the freer use that is being made of the Hospital by the people of Dundee and makes the need of an augmented nursing staff and of structural expansion a matter of urgency.

Extensive reconstructions and additions are planned or in progress, and the first section of the new nurses' home will soon be ready for occupation, but those of us who see from the inside the rapid and inevitable increase of the Hospital's activities hope that work on the main building will not be delayed and that we will have our new theatre, dispensary, X-ray department, laboratories, doctors' rooms, lifts, corridors, resident doctors' quarters, and general office in time to cope with our fresh responsibilities in a suitable and efficient manner.

Apart from cases of infectious and mental disease, for whom provision is made at King's Cross Hospital, Ashludie Sanatorium, and Westgreen Mental Hospital, Maryfield Hospital is charged with the heavy duty of receiving and treating any and every case of genuine illness from the city and from certain outlying districts that any doctor may recommend for admission, no matter how acute the case or how chronic. Maryfield cannot pick and choose. We cannot say that we have no more beds available and that therefore we are not admitting patients. We cannot say that a patient is undesirable and that he should apply to some other hospital. We cannot refuse chronic cases or senile or hopeless cases, and we do not get rid of them automatically when we can do nothing more for them, or when they become delirious and troublesome.

Applications are scrutinised lest any one should be admitted who could be satisfactorily treated and nursed at home. We are not an institution for the care of the aged or the training of the weak-minded, and we are not a mental hospital. We are prepared day and night to perform immediate operations on acute cases, but we also send the ambulance for any neglected sufferer who cannot receive proper nursing at home.

The development of medical services at Maryfield in all departments may be rapid, and the acquiring of additional accommodation for patients is one of the many problems facing those who have the Hospital's future at heart.

During the year the Hospital wards were sometimes taxed almost to the limit of their capacity. On January 1st there were in Hospital 131 men, 137 women, 28 boys and 17 girls; and there were admitted during the year 884 men, 977 women, 270 boys and 226 girls, making the total number of patients treated during the year 2,670.

The Hospital accommodation is recorded as 328 beds, and the average daily number of patients was 300. The smallest number on any one day was 265, and the largest 355.

An analysis of the discharges for the year shows the following diseases treated with the number of cases of each:—

Bone and Joint,	42
Circulatory,	218
Ductless Glands,	4
Infancy and Malformation,	25
Digestive,	200
Genito-Urinary,	120
General,	66
Infectious,	78
Malignant,	63
Nervous,	178
Senile,	113
Pregnancy and Parturition,	111
Respiratory,	353
Mental,	206
Skin,	284
Tuberculosis,	58
Injuries,	65

During the year 398 patients died, most of them being advanced in years, and 17 being under the age of ten:

Operations performed in the theatre by Mr F. R. Brown, F.R.C.S., included :—

- 7 of Appendicectomy.
- 1 of Colostomy.
- 2 of Laparotomy.
- 1 of Salpingectomy.
- 9 for Hernia.
- 3 for Haemorrhoids.
- 3 on Urinary Tract.
- 6 on Abscesses.
- 4 Amputations.
- 2 Breast Operations.
- 3 Cystoscopic Examinations.
- 3 Bone Operations.
- 2 Applications of Plaster.

Mr W. G. Campbell, F.R.C.S., who sometimes acted for Mr Brown, performed the following operations :—

- 3 of Appendicectomy.
- 1 of Laparotomy.
- 1 of Hysterectomy.
- 1 of Orchidectomy.
- 1 of Salpingectomy.
- 2 for Hernia.
- 2 Incisions of Abscess.
- 1 Removal of Glands.
- 1 Application of Plaster.

Mr M. J. Gibson, F.R.C.S., Aural Surgeon, performed the following operations :—

- 3 of Radical Mastoid.
- 3 of Tonsillectomy by Dissection.
- 14 of Tonsillectomy by Guillotine.

Mr Gibson also lectured to the nurses in training, and made numerous examinations of ear, nose and throat in the Theatre and in the Wards.

There was a marked increase in the number of gynaecological patients examined and treated, and 78 confinements took place. There has not been a case of puerperal fever following a confinement in Maryfield Hospital within the memory of the present staff.

Dr R. C. Buist, M.D., C.M., M.R.C.P., lectured weekly to the nurses in training, and performed the following operations:—

- 16 of Dilatation and Curettage.
- 1 of Colporrhaphy.
- 2 of Oophorectomy.
- 1 of Hysterectomy.
- 2 Removals of Condylomata by Diathermy.
- 1 Removal of Polypus.

Dr Allister MacGillivray, M.D., Ch.B., D.O.M.S., Visiting Ophthalmic Surgeon, was in regular attendance throughout the year, and examined and treated eye diseases in the Theatre and in the Wards. The operations which he performed included:—

- 3 of Partial Iridectomy.
- 1 of Iridectomy.
- 3 on Lachrymal Duct.
- 2 for Cataract.
- 1 Cauterisation.

Mr John M. Laburn, L.D.S., Honorary Dental Surgeon, visited weekly and attended to the patients assembled with dental trouble and morbid conditions of the gums. He also made examinations in the Wards, and paid special visits to Hospital when requested to do so. He performed dental extractions in the Theatre under a general anæsthetic on five occasions.

At the Preliminary Examinations of the General Nursing Council for Scotland, junior nurses from Maryfield Hospital secured 25 passes out of 32 subjects, and in the Final Examinations our senior nurses had 90 passes out of 107 subjects.

The following list shows the subjects taught during the year and the number of lectures given in each:—

Anatomy and Physiology,	60
Hygiene,	35
Practical, Part I.	35
Practical, Part II.	20
Dietetics,	14
Medical,	35
Surgical,	35
Gynæcology,	20
Bacteriology,	6
Venereal Disease,	6
Bandaging,	6
Cooking (Demonstrations),	6
Cooking (Practical),	6

In addition to attending these lectures given by doctors on the staff and by the Sister Tutor, nurses undergoing training received individual tuition from the Sister Tutor and had the privilege of being present at most of the operations in the Theatre and at certain gynaecological and ante-natal examinations.

The Visiting Surgical and Medical Staff has been increased, and now includes :—

Mr Brown, Surgery.

Dr Buist, Gynæcology.

Professor Charteris, Medicine.

Dr Emmerson, Anæsthetics.

Mr Gibson, Ear, Nose and Throat.

Dr Hunter, Tuberculosis.

Dr Keay, Special Diseases.

Dr W. L. Kinnear, Diseases of Children.

Mr Laburn, Dental Surgery.

Dr Macdonald, Medicine.

Dr A. MacGillivray, Eyes.

Dr Rankine, Medicine.

I wish to put on record the faithful work done by the resident medical officers during the year. They were always busy and always considerate and obliging, and their case-taking, clinical investigations and attention to patients won them the appreciation of the visiting staff and of all concerned. I will be pardoned for referring also to the most excellent work of Miss Cuthill, the Hospital clerkess, who will be leaving soon, and to her innumerable acts of helpfulness.

The experiment of appointing final year medical students to act as indoor clinical clerks in conjunction with the resident medical officers has been fully justified by the results, and much clinical research of high quality has been done. The clinical clerks have assisted at case-taking, and their sideroom and laboratory work has included examination of urines with tests for albumin, blood, pus, sugar, acetone bodies, bile pigments, urobilin, urea, and organisms; examinations of blood with enumeration of red and white corpuscles, finding colour index, making blood films, counting reticulocytes and blood platelets, testing for fragility, coagulation time, and compatibility, and making estimations of blood sugar, blood urea, and bilirubin in blood serum; examination of gastric contents, pus, urethral secretions, sputum, pleural fluids, and cerebrospinal fluids.

Wassermann, Lange, and Gonococcal Fixation Tests were carried out for us by Professor Tulloch at the Bacteriological Laboratory of Dundee Medical School, and histological examinations were made at the Pathological Department. Professor Capell and Dr Tudhope conducted the post-mortem examinations at Maryfield.

X-Ray examinations are now made for such a variety of morbid conditions that we very much feel the need of an X-ray plant of our own. We are still sending our patients elsewhere to be X-rayed, and the increasing cost may soon attract attention.

There were 225 patients admitted to the Observation or Psychopathic Ward during the year, and of these 68 were transferred to Westgreen or some other mental hospital. Certain cases sent us were quite unsuitable for treatment in the Observation Ward, but it is sometimes difficult to prevent cases of stark insanity being admitted, especially if they have been recommended for admission by outside doctors who hesitate to certify. It should be clearly understood that we are not a mental hospital and that we cannot use restraint or keep a patient against his will. We do not have the accommodation or staff or facilities for treating acute mental disorders, and it is not the policy of the Public Health Department that Maryfield should attempt in any way to do the work of Westgreen.

No case that shows any possibility of becoming violent should be rushed to Maryfield Observation Ward, and speaking generally no degenerate with criminal instincts, no person arrested by the police for obstreperous behaviour, no person with organised delusions of persecution, no person who has recently been in an asylum, no person who is struggling and resisting, and no person who is determined not to come should be brought.

The cases that are most suitable for the Observation Ward are people who are depressed, exhausted, anxious and driven crazy by hardship and fear. These benefit from psychiatric treatment; and most of the psycho-neuroses, and some cases of psychosis associated with organic disease, can be helped. If we had accommodation, cases of enuresis, stammering, muscle spasms, and neuroses from psychic traumata could be admitted and treated, but before we can offer Dundee a complete and efficient Psychopathic Clinic we must have a spacious modern building designed for psychiatric work, with a team of psychologists, psychiatrists and social visitors.

J. B. MACDONALD, M.A., M.B., L.R.C.P.

VENEREAL DISEASES.

Report by DR D. M. KEAY,
Special Medical Officer, Venereal Diseases Scheme.

During the year under discussion the facilities offered to the community for the diagnosis and treatment of venereal disease have continued to be well utilised.

A review of our statistics shows that there has been a slight though definite increase in the total number of new cases together with a well-marked increase in the number of total attendances.

The changing attitude of the public to venereal disease may be reflected in the fact that the increase in number of new cases is more than counterbalanced by the increase in the number of patients who were found not to be suffering from venereal disease but who, having exposed themselves to the risk of infection, had reported for reassurance or prophylactic treatment. In this way our work is tending steadily towards the aspect of preventive medicine.

Further it can be noted that the majority of patients are reporting at an earlier stage of the disease and thereby contributing materially to the easier conduct of the clinic, for the conditions are more amenable to treatment and treatment itself less tedious and exacting.

Possibly the most reassuring feature of the year's work was the well-marked increase in total attendances, a point that demonstrates the fact that with a little consideration and apparent personal interest the majority of patients are more than willing to recognise the value of continuity of treatment.

On the other hand, we must record our disappointment at the number of cases reporting at the female clinic. We would like to think that the incidence of the disease is less in this section of the community, but there is far from sufficient evidence to postulate such a tenet. All the resources at our disposal are utilised to get in touch with all consorts and contacts with a view to eliminating the source of infection and preventing spread. The problem, however, bristles with difficulties, and our efforts do not always meet with success. As long as this state prevails, our work from a Public Health point of view must remain hampered and its value diminished.

New Patients.—The total number of new cases who reported for examination during the year under review was 1,213, an increase of 77 as compared with the previous year. A further 757 patients who had not completed their treatment by 1st January, 1936, continued to attend, and these, together with 30 return cases make a grand total of 2,000 patients dealt with during the year.

An analysis of the new patients gives the following figures for the various diseases. The corresponding figures for 1935 are submitted for purposes of comparison.

	Syphilis		Gonorrhoea		Other V.D.		No V.D.	
	M.	F.	M.	F.	M.	F.	M.	F.
1935,	117	95	384	144	79	—	186	131
1936,	126	104	376	185	101	—	207	114
1935—Male,	766		1936—Male,		810			
Female, ...	370		Female, ...		403			
	<hr/> 1,136				<hr/> 1,213			

The following is a detailed list of the sources of the new cases reporting:—

	Male	Female
Practitioners,	147	135
Dundee Royal Infirmary,	10	31
Ante-natal Clinic,	—	2
Child Welfare Centre,	—	1
Other Institutions,	—	16
Ophthalmic Clinic,	4	2
Traced by M.O. Female Clinic through female patients,	6	—
Traced by M.O. Male Clinic through male patients,	—	8
With S.D. Cards,	81	—
Voluntary,	562	208
	<hr/> 810	<hr/> 403

The new cases of syphilis were made up as follows:—

	Male	Female
Sero-negative Primary,	16.1%	—
Sero-positive Primary	26.1%	—
Suffering from secondary syphilis	5.6%	26.1%
In the tertiary phase of syphilis	29.3%	38.4%
Cases showing involvement of central nervous system (Tabes Dorsalis and General Paresis included)	11.9%	12.5%
Congenital syphilis	11.0%	23.0%

The cases of gonorrhoea were made up as follows:—

	Male	Female
Early stage and without complications	79.0%	34.0%
Well established	21.0%	66.0%

Out-patients.—The total number of out-patient attendances was 46,000 and are compared with the figures for 1935 in the accompanying table.

	Syphilis		Gonorrhoea		Other V.D.		No V.D.	
	M.	F.	M.	F.	M.	F.	M.	F.
1935,	4,254	4,999	21,246	9,848	792	—	430	1,079
1936,	4,742	5,610	24,724	8,525	1,130	—	541	728
1935—Male			26,792		1936—Male		31,137	
Female ...			15,926		Female, ...		14,863	
			<hr/>				<hr/>	
			42,648				46,000	

In-Patients.—The number of cases for whom admission to the hospital was necessary was 65, made up as follows:—

	Syphilis		Gonorrhoea		Other V.D.	
	M.	F.	M.	F.	M.	F.
1935,	11	12	8	30	1	—
1936,	11	9	13	31	1	—
1935—Male		20	1936—Male		25	
Female		42	Female		40	
		<hr/>			<hr/>	
		62			65	

The following are the numbers of in-patient days:—

1935—Male	1,576	1936—Male	1,712
Female ...	1,768	Female ...	1,248
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	3,344		2,960

The number of specimens examined by Professor Tulloch and his staff on behalf of the V.D. Scheme is detailed below:—

	1935	1936
Wassermann reactions,	2,041	2,010
Special Wassermann reactions,	193	243
Gonococcus Complement Fixation Tests,	1,258	1,119
Smears,	2,806	2,151
Cerebro-Spinal Fluids,	16	46
Dark Ground Examinations,	32	44
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	6,346	5,613

Incidence and Types of Diseases.

Gonorrhoea.—In common with other Treatment Centres, gonorrhoea continues to account for the largest percentage of our new cases. The disease, however, is so prevalent, especially amongst the young and middle aged, that our numbers, although

high, are no true indication of the incidence of the infection. The severe and dangerous sequelæ of the condition have been recognised for a number of years, yet it would appear that many patients, and even some practitioners, continue to regard it as a trivial affection.

There must be few ailments known to medicine that cause such suffering and invalidism as this one, and it should be stressed that gonorrhoea is a dangerous disease, and if not treated thoroughly and systematically may lead to serious disablement and may be attended with grave consequences. Further, it should be emphasised that the disappearance of the initial symptoms does not mean cure of the disease, and treatment should be pursued until the medical attendant is satisfied that the infection has been completely eradicated as shown by rigid "tests for cure." Although research and experimental work are being carried out on a gonococcal anti-toxin a specific remedy for gonorrhoea does not yet exist. Treatment may be so prolonged that it becomes tedious, but there is no royal road to cure and no short cut.

In accordance with our usual practice we tried a number of new "remedies" during the past year, but were not impressed with the results.

Syphilis—Acquired and Inherited.—On analysing the cases of syphilis there is an increase in the number of cases in the primary sero-positive stages with a reduction in the cases in the tertiary phases. So far, these figures show a satisfactory trend which we hope will continue, for the lay population now regard syphilis in a serious light and appear to be making earlier application for examination and treatment, if necessary. On the other hand, the percentage of cases showing involvement of the central nervous system and congenital syphilis remain practically the same as last year.

The persistence of the high percentage of cases of late syphilis, tends to defeat, to a large extent, the object of the scheme for the control of venereal diseases. We would remind practitioners that to ensure the effective application of the benefits of modern syphilo-therapy, it is essential to remember that the *spirochaeta pallida* may involve every tissue in the body, and that the diagnosis must be made at the earliest possible stage of the disease. It may be repeated, once again, that the Wassermann reaction, reliable though it be, cannot give the same unequivocal results as the de-

monstration of the *spirochaeta pallida* in morbid exudates. The longer the delay in the institution of anti-specific remedies, the more unsatisfactory are the end results of treatment, for it is rarely possible to give a syphilitic with involvement of vital structures the intensive treatment that an early case would receive.

An Epitome of our Principles Relating to the Control of Congenital Syphilis.

In the course of our work, a feature of great moment which unfortunately varies little from year to year, is that of congenital syphilis. The problem is two-fold — firstly, prevention and, secondly, diagnosis and treatment. We present here a summary of the principles that have formed the basis of our methods in dealing with these two points during the past three years.

Congenital syphilis has been defined as syphilis which has been acquired during any time between conception and birth. The diagnosis may be made during intra-uterine life, at birth or possibly delayed till some time after birth. In Dundee, the majority of cases referred to the clinic belong to the last group, the presence of the disease not being suspected until the appearance of some congenital stigma, usually interstitial keratitis.

It is important to remember that, from a Public Health standpoint, a child suffering from congenital syphilis is by no means a solitary case standing alone. He and his disease have strands reaching out in every direction. Some stretch into the past towards his parents, others involve his brothers and sisters, while others still make contact with his present or future partner and their progeny.

In brief, a particular case of congenital syphilis is not a unit standing alone, but must be held to include a varying number of persons who fall within his ambit.

It must be obvious, therefore, that in no case can it be more true to say that prevention is better than cure, and no Authority should be satisfied until arrangements have been made that will prevent—as far as possible—any child under its control being born with congenital syphilis.

Prevention of congenital syphilis can be achieved by the adoption of two principles.

(1) By every pregnant woman having ante-natal supervision and by having as one of the precautionary measures associated with that supervision, a blood test and treatment if the test prove positive.

(2) By every pregnant woman who has acquired syphilis at any period of her life undergoing a course of active anti-specific treatment irrespective of the result of the blood test.

The extraordinary frequency with which women who have been adequately treated according to standards applied to male patients and who are clinically and serologically negative, give birth to congenitally syphilitic children makes the adoption of this policy the only safe one for the child. That is, prophylactic treatment must be given during each pregnancy to every woman who has had syphilis if the risk to the child is to be avoided.

In our treatment of such pregnant women we aim at securing the birth of a full-time healthy child and at ensuring, or at least reducing the virulence of the disease in the mother herself. To attain these objectives, treatment should be commenced as soon as pregnancy is diagnosed and continued until the child is weaned. Our scheme of treatment follows closely the lines suggested by the League of Nations Committee of Experts in their Plan of Alternating Continuous Treatment, there being no rest intervals. The details of the scheme are given below.

Plan of Alternating Continuous Treatment.

Day	
1	0.15 gm. "914."
5	0.3 gm. "914."
10	0.3 gm. "914."
Weeks	
3-7	0.45 gm. "914."
8-11	0.2 gm. Bismuth 4 doses Pot. Iod.
12-17	0.45 gm. "914."
18-23	0.2 gm. Bismuth 6 doses Pot. Iod.
24-29	0.45 gm. "914."
30-37	0.2 gm. Bismuth 8 doses Pot. Iod.
38-43	0.45 gm. "914."
44-53	0.2 gm. Bismuth 10 doses Pot. Iod.
54-59	0.45 gm. "914."
60-69	0.2 gm. Bismuth 10 doses Pot. Iod.

As an optional scheme more in harmony with the trend toward longer courses, 3 series of 12 injections each of the arsenical drugs

may be given. To secure an overlapping of the heavy metal and the arsenical, begin the bismuth two or three weeks before the last of the longer arsenical course; continue it through the period in which the arsenical is suspended and on into the beginning of the next course. The bismuth is then suspended while the arsenical course is completed.

With regard to extra-uterine congenital syphilis we have adopted the following principles which are in use at the Salford Clinic.

(1) If a child is born whose blood or whose mother's blood gives a positive serological reaction, that child is regarded as suffering from congenital syphilis. The positive serology in the child is taken as an indication for treatment in spite of the absence of clinical signs or even if the mother's blood is negative.

(2) A child whose blood is negative, born of parents of whom one or both give positive tests in the blood or cerebro-spinal fluid, in whom these have been positive during the two years preceding the pregnancy, or who have had insufficient or no treatment; that child must be regarded as suffering from congenital syphilis, even if all clinical signs are absent.

(3) If a woman or her husband has had syphilis and if the woman after having received continuous and intensive modern therapy during her pregnancy from before the fifth month gives birth to a child whose blood is negative, that child may be regarded as free from the disease. It should, however, be kept under observation and serological tests carried out upon it once a year until it attains the age of puberty.

In conclusion we would seek to emphasise the fact that in the diagnosis of congenital syphilis practitioners should remember that the majority of patients do not exhibit any of the classical text-book stigmata, such as Hutchinson's teeth, saddle-nose, etc.

Also, in its prevention we would stress the importance of a routine blood test carried out at the ante-natal clinics. In Denmark with a population of over 4 millions this practice has been carried out for some time, and the number of congenital syphilitics has been reduced to less than 100 cases. Dundee, with no such routine test, can produce about 40 cases any year.

The introduction of such a measure would prevent the birth of children who may become blind, deaf or mentally defective, deprived of individual opportunity and not unlikely to become a burden on the community.

A serological examination is now a routine test in ante-natal centres in certain London Boroughs and some Urban and County centres also. Experience has shown that it has neither been suspected nor resented, and it has not been found to affect the attendance of women who have taken it as a matter of course with the precautionary tests carried out for other reasons.

End Results of Treatment.

As a result of treatment 365 patients were discharged as completely cured:—39 cases of syphilis, 230 of gonorrhoea, and 96 non-specific venereal infections. At the end of the year 924 patients were still under treatment; 141 were transferred to other centres: 257 lapsed treatment during the year, equal to 13 per cent. of the total patients attending.

Follow-Up Work.

Our scheme of follow-up work instituted last year whereby every female patient and child who lapsed treatment for two or three weeks is visited by a Public Health Nurse remains in operation and continues to give satisfactory results.

As can be seen from our statistics, the total number of defaulters was 257 or 13 per cent. of the total patients attending compared with 20 per cent. for last year.

No follow-up work is carried out with regard to patients attending the male clinic, and we are of the opinion that a display of sympathetic consideration and encouragement at the clinic itself outweighs the value of any amount of home visitation. This is suggested by the fact that the percentage of male defaulters was only 12 per cent. a figure which is highly commendable. Although a number of these defaulters remain potentially infective and a possible danger to the community, the figure compares so very favourably with the corresponding return from other clinics that we have some reason to congratulate ourselves.

BACTERIOLOGICAL LABORATORY.

REPORT By PROFESSOR W. J. TULLOCH.

Director, Bacteriological Department, University College.

REPORT OF WORK CARRIED OUT IN THE DEPARTMENT OF BACTERIOLOGY, UNIVERSITY COLLEGE, DUNDEE, ON BEHALF OF THE DUNDEE PUBLIC HEALTH AUTHORITIES, FROM 1ST JANUARY, 1936, TO 31st DECEMBER, 1936.

The Report is presented in the same fashion as in previous years so that continuity of arrangement may be maintained.

I. CONTROL OF VENEREAL DISEASES.

(a) Control of Syphilis.

1. Dark Ground Examinations.
2. Wassermann Reactions (Routine).
3. Special Wassermann Reactions.
4. Examinations of cerebro-spinal fluids.

(b) Control of Gonorrhoea.

1. Microscopical examination of discharges and urine.
2. Gonococcus Complement Fixation tests.
3. Supply of vaccine.

II. CONTROL OF OTHER COMMUNICABLE DISEASES.

(a) Diphtheria.

1. Throat swabs from cases and contacts.
2. Virulence tests.

(b) Enteric Fever.

1. Widal Reactions.
2. Blood cultures.
3. Examinations of faeces and urine in cases and convalescents.

(c) Tuberculosis.

(d) Puerperal Sepsis.

III. SPECIAL INVESTIGATIONS.

- (a) Examination of Milk for contamination.
- (b) Examination of Milk for grading.
- (c) Examination of Milk for tuberculosis.
- (d) Examination of Milks for tuberculosis under the Tuberculosis Order.
- (e) Food-poisoning.
- (f) Primary meningitis.
- (g) Secondary meningitis.
- (h) Faeces for amoebic dysentery.
- (i) Bacillary Dysentery.
- (j) Examination of crusts for smallpox.
- (k) Leptospirochaetosis.
- (l) Blood culture in pyrexia of unknown origin.
- (m) Miscellaneous investigations.

I. CONTROL OF VENEREAL DISEASES.

(a) Control of Syphilis.

1. Microscopical examinations of material to demonstrate the presence of *Treponema Pallidum*.

During 1936, only 44 examinations were made for the presence of *T. Pallidum* in suspected syphilitic sores. This number is much smaller than might be expected, and it is almost certain that there is a large number of cases of this disease whose diagnosis is unnecessarily delayed. The success of preventive and therapeutic measures in this, as in most other communicable diseases, is largely dependent upon early and accurate diagnosis. Delay in diagnosis and treatment means greater danger of spread of the disease, for, with modern methods of treatment, the infectivity of a case of syphilis can be markedly reduced in a very short time.

It is repeated and it cannot be sufficiently emphasised that the Wassermann Test, reliable though it be, cannot give the same unequivocal evidence of syphilitic infection as does the demonstration of *T. Pallidum* in morbid exudates.

Moreover, postponement of treatment means prolonged treatment which is more costly, and the end results of which are much less satisfactory than when active treatment is commenced in the primary stage of the disease.

To call upon the venereal diseases officers to treat late cases of syphilis in which the diagnosis could have been established with

certainly during the early phases of the infection is to place upon these officers a burden of work and a responsibility which is quite unnecessary, and defeats, to a large extent, the object of the scheme for the control of Venereal Diseases.

Of the 44 cases examined, all were sent by the venereal diseases officers.

2. Wassermann Reactions.

The improvement in the technique for conducting the Wassermann Reaction, elaborated during 1926-27, continues to form the basis of the routine method of conducting that test in this laboratory, and the experience now obtained shows definitely that these improvements have greatly enhanced its reliability, and it may be said that the test now is as reliable as it is possible to make it.

The number of routine tests carried out was 3,857, of which 2,010 were from the clinic, 526 from other Public Health Institutions, 212 from private practitioners, and 1,109 from institutions other than those connected with the Department of Public Health.

To the total number there must be added 231 tests in which the material examined was cerebro-spinal fluid, and in such cases a reinforced method is always employed, so that the total of Qualitative Wassermann Reactions conducted is 4,088 for 1936.

3. Special (Quantitative) Wassermann Tests.

The special quantitative Wassermann reaction, elaborated in 1925, continued in use during 1936, in order to control the treatment of cases attending the clinics.

It has proved extremely useful in determining the value of treatment, in determining the progress of treatment, and in the continued observation of Wassermann-fast cases. The number of investigations of that nature carried out during the year was 243, all from the clinic, so that the grand total of Wassermann Reactions for the year under consideration was 4,331.

4. Examination of Cerebro-Spinal Fluids.

During 1936, the complete investigation of cerebro-spinal fluids from cases of suspected Neuro-syphilis was continued. In addition to the ordinary Wassermann test and re-inforced Wassermann test, a complete chemical and cytological examination was performed, while the Lange gold test was employed as routine. Of the 231 investigations, 46 were carried out on material from

patients at the clinic, 21 from Maryfield Hospital, and 9 from other institutions connected with the Department of Public Health, while the remainder of the specimens were sent by consultant physicians.

(b) Control of Gonorrhoea.

One is pleased to note that the interest in this disease is being maintained, for the fact must not be lost sight of that Gonorrhoea may be even a more serious malady than Syphilis.

1. Microscopical examination of discharges for the diagnosis of, and control of treatment in Gonorrhoea.

During 1936, 2,493 microscopical examinations of material for the diagnosis and control of Gonorrhoea were carried out. These were distributed thus:—

	Discharges, including urine after prostatic massage.
From other Public Health Institutions,	133
From the Clinic,	2,151
From Institutions other than those controlled by the Public Health Department,	128
From Private Practitioners,	81

2. Investigation of cases of Gonorrhoea by the Complement Fixation Reaction.

During 1936, 1,462 Complement Fixation Tests have been carried out with a view to the control of treatment or diagnosis of Gonorrhoea. They were distributed thus:—

From the Clinic,	1,119
From other Public Health Institutions,	225
From Private Practitioners,	30
From Institutions other than those controlled by the Public Health Department,	88

The grand total, then, of examinations conducted for the diagnosis and control of Venereal Diseases is as follows:—

Dark Ground Examinations,	44
Wassermann Reactions (Ordinary),	4,088
Special Quantitative Wassermann Reactions, ...	243
Special examinations of Cerebro-Spinal Fluids, ...	231
Microscopical examination of discharges and urine,	2,493
Gonococcus Complement Fixation Tests,	1,462
	<hr/>
	8,561
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3. Gonococcal Vaccine.

During 1936, the laboratory has continued to supply male and female clinics with gonococcus vaccine upon a large scale.

During the last year the increased demand for this has been very heavy indeed, and some difficulty has been occasionally experienced in satisfying the demands of the officers, but we have so far succeeded in fulfilling the requirements.

II.—EXAMINATIONS FOR THE CONTROL OF OTHER COMMUNICABLE DISEASES.

(a) Diphtheria.

1. Cultural examination of throat swabs.

Although during 1936 there has been no notably serious outbreak of diphtheria in Dundee, nevertheless a considerable number of cases have occurred, and the total number of routine swabs examined was 1,077. Of these, 821 were taken from the throat while 256 were of nasal origin.

The percentage of positive throat swabs was 7.9 and of nasal swabs 8.2.

During this year we have continued as a routine measure to cultivate diphtheria swabs both on solidified serum—the recognised procedure—and on McLeod's bellurite blood agar. The results obtained have not been without interest in that a group of cases due to the intermediate type of the bacillus, and in which secondary infection with other bacteria was heavy, difficulty was experienced in obtaining the bacilli from the serum cultures while their presence in the McLeod cultures was easily demonstrated.

A slight modification of the method used to prepare the routine medium—solidified serum—has very largely overcome this difficulty.

The so-called "intermediate" variety of bacillus diphtheriae continues to be the predominant type of that micro-organism in this district, and is responsible for practically all those cases which are clinically severe.

In connection with the examination of throat swabs, two points call for comment, viz :—(1) The result of the bacteriological

examination of the throat is of great importance to the Public Health officer, and its value to the practitioner is no less great when he is dealing with doubtful cases, but when the clinical features suggest diphtheria, it is unwise to delay the administration of anti-toxin until the result of the bacteriological examination is available. A case which is clinically diphtheria should be treated as diphtheria. If complete investigation negatives the diagnosis no harm is done, but harm is liable to be done to cases of diphtheria when the administration of serum is delayed. (2) In cases which are clinically diphtheria it is well to have the diagnosis verified by bacteriological examination, but it is especially important that treatment be initiated forthwith, and in order that no misunderstanding should arise from this cause, every report on the examination of a throat swab which is negative is sent on a form on which the following is printed in red :—

“ IMPORTANT.—Please note that a negative swab result does not exclude diphtheria. The laboratory findings pre-suppose that the suspicious lesion has been touched with the swab—NOT ALWAYS POSSIBLE IN CERTAIN TYPES OF DIPHTHERIA, ESPECIALLY LARYNGEAL DIPHTHERIA. CLINICALLY SUGGESTIVE cases should be treated without awaiting result of swab. DELAY IS DANGEROUS.

2. Virulence Test.

During 1936, the virulence of strains of bacteria resembling bacillus diphtheriae, and recovered from the respiratory tract of 63 convalescents or suspected carriers, was determined.

The object of this type of investigation is to ensure on the one hand that convalescents who **appear** to remain infected with the diphtheria bacillus are in fact infected and infective, and also to ensure that suspected carriers do harbour the organism.

Care must be experienced in these matters, as harmless bacteria, which are normal inhabitants of the throat but in appearance resemble the diphtheria bacillus, may be mistaken for that micro-organism. The result of such error is that the period of hospital residence of convalescents may be quite unnecessarily prolonged, or that an individual may be wrongly suspected of being a carrier and so a potential danger to his fellows.

Accurate information concerning these so-called “ diphtheroid ” bacilli in such circumstances reduces expenditure in the case

of convalescents and is protection from unnecessary inconvenience in that of the suspected carrier.

The details of these 63 are as follows :—

- (i.) Gravis strains—Nil.
- (ii.) Intermediate strains—28, of which 3 were avirulent.
- (iii.) Mitis strains—7, of which 1 was avirulent.
- (iv.) “ Diphtheroids ”—12.
- (v.) Cultures containing Hofmann bacillus—8.
- (vi.) In 8 cases the diphtheroid bacilli had disappeared from the cases before the investigation was made.

The avirulent strains were of interest in that, although in all other respects they qualified as true diphtheria bacilli, they were, at least so far as laboratory investigation was concerned, devoid of disease producing qualities.

(b) Control of Enteric Fever.

Fortunately during the year 1936 very few cases of enteric fever occurred in the city. Although the examination of material from suspected cases of this malady involved the investigation of 197 specimens in all, the number of cases in which the suspicion proved to be well founded was only eight.

These examinations, many of which were performed solely for the purpose of excluding a diagnosis of enteric, were as follows :—

1. Widal Reactions.

In all, 146 tests were carried out on 74 specimens of blood from suspected cases of enteric fever. The duplicate test against both typhoid and paratyphosus beta continues to be employed as a routine.

In only 5 instances a positive result was obtained, one being from a case of typhoid and 4 from paratyphoid beta infection.

During the year under review we continued to test all bloods submitted for the Widal reaction against the bacillus abortus of Bang.

Among the 73 specimens so tested, 3 agglutinated the bacillus abortus in such low concentration that the reaction was diagnostic.

In addition, examination of suspected cases of undulant fever by blood culture was performed in 3 instances with, however, negative findings. While two specimens were specially submitted for agglutination against bacillus abortus.

It would seem then that there is a small but an appreciable incidence of undulant fever in our city, the causal agent of which is the bacillus abortus of Bang.

2. Blood Culture.

The most satisfactory of all methods for diagnosing enteric fever is blood culture, as by this means an early and accurate diagnosis can be established. In the past, this method has not found much favour among the practitioners of the City.

The method was, however, employed in 19 suspected cases, but in none of them was a positive result obtained.

In many instances the procedure is carried out too late in the disease to permit of positive results being obtained.

In this connection it cannot be sufficiently emphasised that **blood culture is the only method whereby an early and accurate diagnosis of enteric can be made, and it should be employed during the first week of the illness.**

The significance of this, from the standpoint of public health, is not only that early diagnosis leads to the necessary precautions being taken to prevent further spread of the infection, but, in this instance, the diagnosis may be made at a period when the infectivity of the case is still minimal.

3. Examination of Fæces, Urines, etc., from Enteric Convalescents, and re-examination of Cases occurring in the past year.

(i.) Fæces.

During 1936, 90 specimens of fæces from convalescents of enteric fever or from possible carriers of the disease were examined, the typhoid bacillus was not found in any, while the bacillus paratyphosus beta was present in three.

(ii.) Urines.

During 1936, only 5 specimens of urine from convalescents of enteric fever were made the subject of cultural investigation. None gave a positive finding.

Attention should be specially directed to these cases of urinary infection in enteric, as patients with infective urine are always a greater danger to others than are those whose intestinal contents alone are infected. The reason for this is that frequently less care is exercised in the disposal of urine than of fæces.

Indeed, chronic urinary carriers are in a special sense a menace to those around them, and it is important that this be adequately appreciated.

(iii.) Other material examined for enterica infection.

During the course of 1936, post-mortem cultural investigation of spleen pulp was required in 8 instances in order to exclude the possibility that fatal cases of undiagnosed pyrexia were in reality cases of enteric fever.

None proved to be infected with the bacteria in question.

In one instance a gall bladder removed at operation was similarly examined as there was a remote possibility that at one time the patient had been an enteric carrier. The finding was, however, negative.

(c) Control of Tuberculosis.

315 specimens of sputum were examined from cases in Dundee during 1936, a figure showing no notable change from the previous years. The percentage of positive findings was 8 per cent., which is somewhat lower than in previous years.

In addition to the investigations conducted on behalf of the City Health Authority to assist in the control of tuberculosis, numerous specimens of morbid material submitted from patients in institutions are of such a nature that it is necessary to exclude tuberculosis. During 1936, 412 such specimens have been investigated, comprising:—

Urines,	176
Cerebro-spinal fluids,	87
Pus, including pus from glands,	89
Pleural fluids,	34
Fluids from joints,	10
Miscellaneous,	16

412

(d) Puerperal Sepsis.

During 1936, the investigations of material from puerperal sepsis has been continued. The improvements in technique introduced in 1932 with a view, if possible, further to elucidate the question of the relative importance of different varieties of streptococci, as causal agents of the condition, have been used throughout the year, and the following are the results obtained :—

In all, 184 examinations from 96 patients have been carried out during the year under review, and these comprise :—

(a) Examination of uterine culture,	174
(b) Blood Cultures,	10

As puerperal sepsis is, in the main, associated with streptococcal infections, and as the severer forms of the disease appear usually to be caused by streptococcus hæmolyticus, the following figures dealing with the recovery of streptococci from puerperal cases may be of some interest.

In 6 patients both blood culture and full investigation of uterine discharge was carried out, the following results being obtained :—

(i.) In 2 cases streptococcus hæmolyticus was shown to be present both in the blood and in the discharge.

(ii.) In 2, streptococcus viridans was shown to be present in the uterine discharge, but not in the blood.

(iii.) In 2 instances, streptococcus was recovered neither from the uterine discharge nor from the blood.

(iv.) In 5 additional cases, streptococci were not recovered from the blood while the uterine discharges were not submitted for examination.

The results may be summarised thus :—

	Uterine Culture	Blood Culture
Patients,	91	11
Streptococcus hæmolyticus,	25	2
Streptococcus viridans,	17	2
No streptococci,	49	7

III.—SPECIAL INVESTIGATIONS.

During 1936, 77 specimens of milk were examined to determine the degree of bacterial contamination, and the presence of organisms of fæces origin. Included in this figure are 18 which were specially examined for grading.

The results of these examinations are as follows:—

1. Test for presence of B. Coli.

B. Coli test positive in .001 c.c. or less—unsatisfactory,	7
B. Coli test positive in .01 c.c., negative in .001 c.c.— doubtful,	7
B. Coli test positive in .1 c.c., negative in .01—good,	12
B. Coli test positive in 1 c.c., negative in .1—very good, ...	16
B. Coli test negative in 1 c.c.—excellent,	35
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	77
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So far then as the B. Coli test is concerned, 63 of these milks are up to the standard of Grade A milk, while 51 pass the more severe test for certified milk.

2. Total Number of Micro-organisms.

(a) Over 5,000,000 per c.c.,	3
(b) Over 3,000,000 but less than 5,000,000 per c.c.,	3
(c) Over 1,000,000 but less than 3,000,000 per c.c.,	4
(d) Over 700,000 but less than 1,000,000 per c.c.,	6
(e) Over 500,000 but less than 700,000 per c.c.,	4
(f) Over 300,000 but less than 500,000 per c.c.,	3
(g) Over 200,000 but less than 300,000 per c.c.,	7
(h) Over 100,000 but less than 200,000 per c.c.,	8
(i) Over 50,000 but less than 100,000 per c.c.,	13
(j) Over 30,000 but less than 50,000 per c.c.,	4
(k) Over 10,000 but less than 30,000 per c.c.,	8
(l) Over 5,000 but less than 10,000 per c.c.,	5
(m) Less than 5,000 per c.c.,	8
(n) Spoiled Sample,	1
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	77
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(b) Examination of Milks for Grading.

Included in the above were 18 specimens in which the special examinations for grading and certification were carried out. The investigation in such circumstances is conducted according to a standard method advised by the Department of Health for Scotland, these milks being submitted by dairies in Dundee for grading under the Milks (Special Designation) Order, 1928, and Amendment Order (Scotland), 1928. Of the 18 milks, 14 were remarkably clean, in that bacillus coli could not be demonstrated even in 1 c.c., while a total count of each is as follows:—

Colon Test	Total Count
Negative in 1 c.c.	3,500 per c.c.—Feb.
Negative in 1 c.c.	4,000 per c.c.
Negative in 1 c.c.	4,800 per c.c.
One Sample spoiled	
Negative in 1 c.c.	1,600 per c.c.—May
Negative in 1 c.c.	8,900 per c.c.
Negative in 1 c.c.	83,000 per c.c.
Negative in 1 c.c.	85,000 per c.c.
Negative in 1 c.c.	5,400 per c.c.—Aug.
Negative in 1 c.c.	7,800 per c.c.
Negative in 1 c.c.	14,900 per c.c.
Negative in 1 c.c.	900 per c.c.—Nov.
Negative in 1 c.c.	2,500 per c.c.
Negative in 1 c.c.	3,250 per c.c.
Negative in 1 c.c.	7,100 per c.c.
Positive in .1 c.c. (Grade A)	38,000 per c.c.
Positive in .1 c.c. (Pasteurised)	54,000 per c.c.
Positive in .01 c.c. (Pasteurised)	39,000 per c.c.

(c) Examination of Milk for the Presence of Tubercle Bacilli.

During 1936, 25 samples were tested for the presence of tubercle bacilli by the inoculation method. Of these none proved to be tuberculous—a finding that is very similar to those of previous years.

(d) Examination of Milks for Tuberculosis under Tuberculosis Order.

During 1936, only one specimen of milk was investigated for the presence of tubercle bacilli under the Tuberculosis Order, the finding being negative.

(e) Food Poisoning.

During the year under consideration no extensive outbreaks of food poisoning occurred in the City. There were, however, nine suspected sporadic cases, of which one only proved to be true bacillary food infection.

In this instance the causal agent was the *Aertrycke* bacillus.

As so often happens, several of these suspected cases of food poisoning proved to be bacillary dysentery.

The investigation of these 9 suspected cases involved the examination of 12 specimens of morbid material and one sample of food.

(f) Primary Meningitis.

During 1936, 28 cases of such nature that they might have been primary meningitis occurred in Dundee, and all were made the subject of extensive bacteriological examination. Of these, 12 proved to be cases of true cerebro-spinal (meningococcal) meningitis, each of which was examined several times during the progress of the illness. The total number of tests made in this condition was 64.

The number of cases of meningococcal meningitis is more than in previous years, and although the number is still small it should be noted that sporadic cases continue to occur. In view of this it would be well to bear in mind the possibility of the reappearance of the malady in our population.

In addition to these suspected cases of meningococcal meningitis, there were 20 in which primary meningitis, other than that due to infection with the meningococcus, was suspected.

Of these, 7 proved to be due to the pneumococcus, two to infection with the so-called influenza bacillus, one was an instance of unusually acute tuberculous infection, and two were secondary to brain abscess.

There were, therefore, 24 cases in which, although primary meningitis was suspected upon clinical grounds, that diagnosis was not established when complete investigation was undertaken.

These cases of "meningismus" where the clinical finding suggest, but examination fails to reveal, infection are interesting in that the condition is often associated with pneumococcal invasion in other parts of the body.

In 4 of the 48 cases, large numbers of inflammatory cells were present in the cerebro-spinal fluid, and clinically the cases recalled a condition that was cited in the report for the year 1930.

(g) Secondary Meningitis.

During 1936, we were not called upon specifically to investigate any cases of meningitis occurring as a sequel to injury, or arising as a complication in other conditions.

Actually two such cases were encountered, and these have been dealt with in the previous paragraph, namely, that in which meningitis, secondary to brain abscess, occurred.

The total number of examinations performed in the investigation of suspected meningitis other than meningococcal meningitis was 23.

(h) Amœbic Dysentery.

Eight cases of suspected amœbic dysentery occurred in the City during 1936; complete investigation negated this diagnosis in all.

(i) Bacillary Dysentery.

During 1936, as in previous years, cases of bacillary dysentery, due to the mannite fermenting dysentery bacilli, have occurred in Dundee, and, as before, these have been regarded as "food poisoning" until laboratory investigation revealed the true character of the illness.

In no instance, I am glad to say, was there an institutional outbreak, and furthermore family outbreaks were conspicuous by their absence.

All the cases were, therefore, sporadic, so that the source and vehicle of infection was difficult to determine.

In all, 278 examinations were carried out in 222 suspected cases of bacillary dysentery during 1936. Of these, 272 were examinations of fæces and 6 were agglutination tests with the serum of convalescents or contacts.

These cases may be categorised as follows :—

(i.) In nine instances the cases occurred as small familial or institutional outbreaks as follows :—

- (a) Four in one family, the infecting bacillus being possessed of V, W, X and Y antigens.
- (b) Three in one family, the antigenic constituents being V, W, X, Y and Z.
- (c) Two in one family in which the causal bacillus exhibited the same complexity of antigenic structure as in "b."
- (d) Three institutional cases in which the infecting bacillus contained antigens V, W, Y and Z.
- (e) Three in one family, the antigenic constitution of the micro-organism being V, W, Z.
- (f) Two institutional cases in which the infecting bacilli were of the XV type.
- (g) Two cases in one family in which the XV type was also responsible for the condition.
- (h) Three cases in one family in which the organism, although exhibiting the morphological, cultural and fermentative characters of one of the "Flexner" group, did not react with any of the antisera to the recognised serological sub-groups thereof. Such strains of dysentery bacilli may be designated *Aberrent Flexner bacilli*.

(ii.) Sporadic Cases.

In all there were 62 cases of this disease during 1936 that were of a purely sporadic nature.

1. From 32 of these there was isolated an organism belonging to the Flexner group.

The antigenic constituents of these were as follows :—

(a)	Antigenic type	VWXYZ	.....	4 cases
(b)	do.	VWXY	.....	1 case
(c)	do.	VWYZ	.....	2 cases
(d)	do.	VWZ	.....	3 cases
(e)	do.	WXY	.....	1 case
(f)	do.	VX	.....	1 case
(g)	do.	VY	.....	1 case
(h)	do.	WZ	.....	1 case
(i)	do.	X	.....	1 case
(j)	do.	W	.....	5 cases
(k)	do.	Z	.....	4 cases
(l)	do.	" Aberrant Flexner "		8 cases

2. From one there was recovered the Sonne III. bacillus.

3. From one was isolated the Morgan I. bacillus which, although not strictly a member of the group of dysentery bacilli, is responsible for a condition which clinically resembles that malady.

4. In addition, there were 28 cases in which the intestinal discharge contained pus, blood and mucus and, although we failed to isolate dysentery bacilli from them, they may be regarded as cases of true bacillary dysentery.

Often in dysentery, the infection is transient and moreover the preservation of the causal agent in the discharges, once they leave the body, is uncertain.

For this reason it often happens, especially in sporadic cases when diagnosis is delayed, that although all the signs of the disease are manifest the causal agent is not recovered from the morbid material.

(iii.) Fatal Cases.

During 1936, two cases of bacillary dysentery were fatal. In one the infecting organism was a bacillus with very wide relationships within the Flexner group, possessing V, W, X, Y and Z antigens, while the other was due to an aberrant strain.

The disease bacillary dysentery is actually of greater importance as a public health problem at the present time than is enteric

fever, and the regularity with which family outbreaks and sporadic cases occur each year indicates the need for continued effort being made to reduce its incidence.

The evidence available points to personal cleanliness, careful handling of foodstuffs and adequate nutrition of the people as important factors in reducing the occurrence of bacillary dysentery.

(j) Variola Vaccinia Flocculation Reaction.

During 1936, no cases of smallpox occurred in the City, and we were only on three occasions called upon to perform this reaction to corroborate a diagnosis of severe chickenpox.

It may be noted, however, that the help of the laboratory has been requested by other public health authorities to assist in the investigation of doubtful cases of smallpox. Fortunately only negative findings were obtained in cases from this part of the country. Subsequent events proved the cases to have been Varicella.

(k) Leptospirochaetosis.

There was only one case of suspected leptospirochaetosis during 1936. The diagnostic test actually proved to be positive although the subsequent history of the case showed that this finding was purely a coincidence.

Two specimens were examined from this patient.

In connection with this malady the following points are worthy of note :—

In the first place an outbreak of leptospirochaetosis occurred recently among fish workers in Aberdeen, and as we know from the survey of rats made during 1925 that the rats of Dundee are as heavily infested with leptospira as are those of Aberdeen, it is possible, should the required conditions be fulfilled, that this disease might occur in Dundee.

The conditions in which propagation of infection from rat to man is liable to occur are those associated with the handling in moist surroundings of certain foodstuffs which attract rats.

Secondly, Schuffner has shown that in Holland a large percentage of cases of the disease do not become jaundiced. It is not

improbable then that some cases of " pyrexia of unknown origin " are really of this nature.

Thirdly, it has recently been established that as the disease progresses the urine of the patients acquires the property of killing the causal organisms; it follows from this that a negative finding on examining the urine is of no significance.

Fourthly, Schuffner has elaborated a test, using a small quantity of the patient's blood, whereby an accurate diagnosis can be easily established at any time after the first few days of the illness.

During 1936, we have collaborated with Dr John Smith, of the Public Health Department of the City of Aberdeen, with a view to elaborating a simplified method for conducting the Schuffner test.

This simple method is easy to perform and equally easy to interpret; it should make the serological diagnosis of leptospirochaetosis available to all who have contact with even the most modestly equipped laboratories.

(1) Blood Culture in Pyrexia of Unknown Origin.

During 1936, the number of blood cultures that have been made to assist in the diagnosis of pyrexia of unknown origin was 66. The value of the procedure both from the standpoint of diagnosis and of prognosis is considerable.

Of these, 58 failed to show the presence of bacteria in the circulation, while the organisms present in those which proved positive were as follows :—

(i.)	<i>Streptococcus hæmolyticus</i>,	.....	1
(ii.)	<i>Streptococcus viridans</i>,	.....	1
(iii.)	<i>Staphylococci</i>,	.....	1
(iv.)	<i>Pneumococci</i>,	.....	1
(v.)	<i>Bacillus fæcalis alkaligenes</i>,	.....	3
(vi.)	<i>Aertrycke bacillus</i>,	.....	1

The case of the Aertrycke infection has already been dealt with under heading "e"—bacillary food poisoning.

It is also worthy of note that in several instances these blood cultures were made for the specific purpose of excluding infection with the bacillus of undulant fever—bacillus abortus.

(m) Miscellaneous Investigations.

In addition to the work categorised under the above headings, a number of miscellaneous tests, etc., have been carried out on behalf of the Public Health Authority of the City of Dundee.

Among these miscellaneous investigations were the following:—

(i.) Vincent's Angina.

Material from 8 cases of suspected Vincent's Angina was investigated during the year under consideration.

(ii.) Investigations for King's Cross Hospital.

1. Complete examination of pleural pus,	5
2. Agglutination in cases of suspected infection with organisms of doubtful pathogenicity,	2
3. Complete examination of cerebro-spinal fluid, in suspected case of poliomyelitis,	1
4. Complete examination of cerebro-spinal fluid,	1

(iii.) Investigations for Maryfield Hospital.

1. Preparation of vaccine,	2
2. Complete examination of pus,	3
3. Complete examination of urine,	1
4. Complete examination of cerebro-spinal fluid,	1
5. Examination of pus from empyema,	5
6. Complete examination of pleural fluid for tuberculosis, ...	1
7. Supply of reagent for producing "protein shock,"	1

(iv.) Investigations for Westgreen Mental Hospital.

1. Complete examination of pus, 1

(v.) Investigations for Ashludie Sanatorium.

1. Complete examination of sputum, 1

(vi.) Investigations for Public Health Institute.

1. Preparation of vaccine from Tuberculosis Dispensary case, 1

During 1936, the collection of serum from patients convalescent from measles was continued in order that a supply of this might be available for the treatment of grave cases of that illness in weakly children.

The separation of the serum and the testing of it to ensure that it is both sterile and suitable for the purpose in view, constituted an additional service rendered by the laboratory during 1936.

In addition to these examinations performed on behalf of patients under treatment in hospitals or clinics administered by the Public Health Authority of the City, a number of investigations dealing with communicable disease were also carried out.

These comprise :—

1. Three cases of suspected malaria, of which one was positive.
2. One case of infestation with *Taenia mediocanellata*.
3. Two cases of suspected infection with parasitic nematodes.
4. Three cases of suspected encephalitis.
5. One case of anterior poliomyelitis.
6. In several instances we were asked to determine the serological type of the pneumococcus responsible for pleuritis, meningitis, pneumonia, etc.
7. One case of infestation with *Trichomonas vaginalis*.
8. Examination of fish with nematode infestation.
9. Examination of trout which died from unknown condition.
10. Examination of spleen from horse that died from tuberculosis.
The infecting organism proved to be of the bovine type.

11. Examination of material from three cases of suspected anthrax in humans. One of these proved positive, and fortunately we were able to supply Sclavos serum at once.
12. Examinations of a consignment of oil cake suspected to be responsible for cases of bovine anthrax.
13. Examination of bovine blood for anthrax.
14. Examination of blood by the " Paul Bunell " test from four cases of glandular fever.
15. Complete post-mortem examination of material from a case of " pink disease."

The work of the laboratory on behalf of the Public Health Authority of the City of Dundee during 1936 has been very similar to that in previous years, excepting 1931 and 1932 when, owing to the survey of market milk, the volume of work done was in excess of average years, and in 1935 when a survey of milk on behalf of the Milk Marketing Board also increased the number above the average.

It has been a very pleasant duty indeed to conduct the work herein reported, and the success which has attended it is due in no small measure to the ready, willing and helpful co-operation of the staff of the Public Health Department and the hospitals and clinics attached thereto.

This co-operation does much to lighten the work, makes it more interesting, increases efficiency, and offers educational facilities to the department and its ancillary clinics.

MATERNITY SERVICES.

Reports by DR. MARGARET SCOTT-DICKSON,
Maternity Services Medical Officer.

DR. MARGARET FAIRLIE.

DR. H. GORDON CAMPBELL.

There have been no material alterations in the general working of the Scheme during 1936.

The only disquieting fact in the year's report is the increase in the Infantile Mortality rate, and this has already been dealt with in the general report of the Medical Officer of Health. The great increase in the actual number of deaths of infants occurred in those of the age period 1—3 months, and was accounted for by the large number of fatal cases of respiratory diseases.

I again take the opportunity of thanking all the members of the Staff for their willing co operation in the work, and must again pay tribute to the members of the Dundee Voluntary Health Workers' Association for their kind assistance at the Clinics and Day Nurseries, and for the supply of clothing for the children attending the Centres and Day Nurseries.

There was no demand on the part of the mothers this year for Sewing Classes, so they were discontinued.

The detailed report of the work follows, including reports from the Medical Officers in charge of the Special Clinics.

Infantile Mortality.

(a) Number of deaths	256
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(b) Rate per 1,000 births	81
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(c) For classification of deaths in age groups and causes of death—See Table XII., in the statistical section of the report.

256 deaths of children under one year were noted by the Maternity Services Scheme, distributed as follows :—

1st week	2nd week	3rd week	4th week	1-3 months	3-6 months	6-9 months	9-12 months	Total
80	10	12	15	63	28	23	25	256

Of these 107 were breast fed.

11 were partly breast fed.

10 were mixed feeding (breast and artificial feeding).

81 were artificially fed.

In 47 cases feeding was not commenced due to prematurity.

Regarding the feeding, the ages at which those infants died were as follows :—

	1st month	2nd month	3rd month	4th month	5th month	6th month	7th month	8th month	9-12 months	Total	Feeding not commenced
Breast	48	23	8	4	3	2	3	3	13	107	..
Partly Breast	2	5	1	0	0	0	1	0	2	11	..
Mixed	0	1	2	3	0	0	1	1	2	10	..
Artificial	21	10	11	7	7	2	2	5	16	81	..
Totals	71	39	22	14	10	4	7	9	33	209	47

In 256 cases in which particulars were obtained, 43 mothers were engaged in work outside their own homes ; and 213 were not thus engaged.

34 children who died were illegitimate.

23 children who died were twin births.

76 deaths were due to prematurity.

In addition to deaths of infants under one year of age, 122 deaths of children from 1-5 years of age were noted by the Department.

Births.

(a) Number registered (corrected)	...	...	3,171
(1) Legitimate	...	...	2,959
(2) Illegitimate	...	...	212
(b) Number notified	...	...	3,464
(c) Number classified according to source of notification (doctor, midwife, etc) :—			
Doctor	...	...	179
Doctor and Midwife	...	...	213
Midwife	...	...	823
Maternity Ward, D.R.I.	...	...	1,683
Maryfield Hospital...	...	...	74
Clement Park Maternity Home	...	...	381
Parents	...	...	7
Other sources	...	...	104
(d) Number of stillbirths (births of dead children)			186

PARTICULARS OF BIRTHS NOTIFIED AND REGISTERED
IN DUNDEE DURING 1936.

Number of births taken from Registrars' Weekly Returns (including transfers out)	3381
Difference between Notification and Registration (1935-1936 and 1936-1937)	3
	<hr/> 3384
(1) Number of live births occurring in Dundee ...	3401
Number of stillbirths	186
	<hr/>
(2) Total number of births occurring in Dundee ...	3587
(3) Number of births notified, in accordance with the Act— <i>i.e.</i> , 93.5% of total number of births (3587)	3464
(4) Number of live births notified— <i>i.e.</i> 96.4% of live births (3401)	3278

CLASSIFICATION OF NOTIFICATIONS.

Attendance in relation to notification :—

By whom Notified.	Notified.	Unnotified.	Total.	Total cases attended.	Percentage of total births.
Doctors	179	116	295	406	11.3
Doctor and Midwife	213	—	213	213	5.9
Midwives	823	2	825	825	23.0
Mat. Ward D.R.I....	1,683	4	1,687	1,687	47.0
Maryfield Hospital	74	—	74	74	2.0
Clement Pk. Mat. Home	381	1	382	382	10.0
Parents	7	—	7	—	—
Other Sources ...	104	—	104	—	—
	<hr/> 3,464	<hr/> 123	<hr/> 3,587	<hr/> 3,587	<hr/> 99.8

STILLBIRTHS

186 stillbirths were notified during 1936.

36 of these occurred in the practice of Midwives which were classified as follows :—

	Macerated Foetus	Complicated Labour	Congenital Deformities	Unclass- ified	Total
Full time Infants	7	9	1	1	18
Premature Infants	10	2	5	1	18

Maternal Mortality.

(a) Number of deaths resulting from miscarriage or childbirth	22
(b) Number of deaths resulting from Puerperal Sepsis	4

During 1936 an inquiry was made into 33 deaths of women occurring in childbirth or within 28 days after, or later if illness originated during pregnancy, childbirth or puerperium. 7 of the above deaths occurred in women whose homes were outwith the Dundee boundary, but who had been brought into the City for hospital treatment of complications arising during pregnancy, parturition or puerperium, and the information regarding these cases was sent to the medical officers of the districts to which they belonged.

In the 26 Dundee deaths the attendants at birth were—Maternity Ward Dundee Royal Infirmary I.P. 12, O.P. 2, Died before admission to Maternity Department 3, General Ward D.R.I. 1 ; Perth Royal Infirmary (Death Transfer) 1 ; Doctor, 2 ; Doctor and Midwife, 1 ; Midwife, 2 ; Maryfield Hospital, 1 ; Nursing Home, 1.

CLASSIFICATION OF CERTIFIED CAUSES OF DEATH (26 cases) :—

(a) Deaths from emergencies and other causes directly due to Parturition (16 cases) :—

Puerperal Sepsis	4
Ante-partum Haemorrhage	1
Ante-partum Haemorrhage with Placenta Praevia	1
Accidental Haemorrhage ; Secondary Shock	1
Intra-partum Haemorrhage	1
Placenta Praevia ; Ante and Post-partum Haemorrhage	1
Adherent Placenta ; Post-partum Haemorrhage	1
Haemorrhage from Ruptured Pregnant Uterus	1
Cardiac Failure, following Post-partum Haemorrhage ; Anaemia	1

Acute Yellow Atrophy of the Liver	...	1
Post-partum Eclampsia	... ..	1
Pulmonary Embolism	... ..	1
Hydatiform Mole ; Post-partum Haemorrhage ; Phlegmasia Alba dolens ; Multiple Infarcts		1
	—	16

(b) Causes of Death not directly connected with Parturition (6 cases) :—

Carcinoma (breast)	... ..	1
Cardiac Failure following childbirth	...	1
Chronic Endocarditis ; Pregnancy ; Post- operative Shock	... ..	1
Probably Embolism of Coronary Artery, death occurring under Gas Oxygen and Ether anaesthetic during Caesarian Section	...	1
Cardiac Failure ; Incompetence following Caesarian Section ; Terminal Broncho- pneumonia	... ..	1
Subacute Nephritis	... ..	1
	—	6

(c) Causes of Death associated with Pregnancy but not with Parturition (4 cases) :—

Toxaemia of Pregnancy	... ..	1
Ruptured Ectopic Gestation	... ..	1
Nephritis of pregnancy	... ..	1
Haemorrhage from Ruptured Uterus (died in ambulance van)	.... ..	1
	—	4

Report Under Midwives and Maternity Homes (Scotland) Acts, 1915 and 1927.

The following is a list of Midwives who, during 1936, intimated their intention to practise Midwifery in the City of Dundee.

NAME and ADDRESS	C.M.B. Reg. No.	REMARKS.
Anderson, Mrs Isabella D.—197 Princes Street ...	2,863	Trained.
Andrews, Miss Dora B.—4 Boyd Place, Broughty Ferry	8,253	Trained.
Angus, Mrs. Clementina—96 King St., B.F. ...	3,057	Bona fide.
Arnott, Miss Jean—36 Dundonald Street ...	1,182	Bona fide.
Bowman, Mrs. Jessie—10 Hilltown ...	4,958	Trained.
Brodie, Miss Chrissie,—Craigie Nursing Home, ...	7,947	Trained.
Craig, Mrs. Margaret—10 Albert Street ...	6,994	Trained.
Dobson, Mrs Rachel H.—Elmridge, 6 Glamis Drive	4,423	Trained.
Duffus, Miss Mary C.—34 Victoria Street ...	2,567	Trained.
Gouk, Miss Margaret R.—10 Tofthill, Lochee ...	6,221	Trained.
Gowans, Miss Eliza—2 Erskine Street ...	5,925	Trained.
Gunn, Mrs. Sarah—9 Corso Street ...	5,404	Trained.
King, Mrs Ellen—53½ Perth Road... ..	755	Trained.
Lowe, Mrs. Jane R.—2 Brown Street ...	432	Trained.
Masson, Mrs. Jane—3 Tayview Buildings, B.F.	3,122	Bona fide
Neill, Miss Jane Y.—71 Ann Street ...	7,434	Trained.
Ramsay, Mrs Ann C.—281 Hilltown ...	733	Trained.
Rickard, Mrs Helen M.—125 Perth Road ...	6,453	Trained.
Smith, Mrs. Jamesina—73 Church Street ...	1,553	Bona fide
Stewart, Miss Jean B.—5 Balgavies Avenue ...	7,713	Trained.
Suttie, Miss Annie—43 Tullideph Road ...	4,174	Trained.
Thomson, Mrs Mary—16 Fleming Gardens, S. ...	10,225	Trained.
Tulloch, Mrs. Isabella—20 Corso Street ...	6,231	Trained.
Williamson, Miss Edith—55 Dens Road ...	10,712	Trained.
Collings, Miss Lilian F.—Clement Pk. Maternity Home	12,098	Trained.
Martin, Miss Violet M. A. do. Matron	9,999	Trained.
Ross, Miss Johanna do. ...	11,461	Trained.
Snape, Miss Violet C. do. ...	8,644	Trained.
Tippen, Miss Eliz. V. B. do. (Trans. to	6,795	Trained.
another S. A. Mat. Home, January 1936).		
Dixon, Miss Norah—Clement Pk. Maternity Home	12,232	Trained.
(Transfer in 26/1/36)		
Tucker, Miss Florence—Clement Pk. Maternity Home	12,408	Trained.
Stennett, Miss Kate C.—Sister-in-charge Maternity Dept.	12,100	Trained.
Dundee Royal Infirmary		

(1) In January, 1936, 30 midwives notified their intention to practise midwifery in Dundee. During the year 2 midwives gave notice of their intention to practise in Dundee. 1 midwife left town.

(2) This leaves on the local roll of midwives at the end of December, 1936, 31 names. 17 of the 31 are actually practising as midwives.

(3) The midwives attended a total of 1038 births (including 213 cases where the midwife acted as a midwife though a doctor was in attendance)—that is 28.9 per cent. of the total births occurring in the City, including stillbirths.

(4) The extent of the individual practice of each midwife varies, one midwife having 127 cases, another only attended 13 cases. The average to each midwife in practice is 61 cases.

(5) 80 visits were paid by the Inspector of midwives and her Assistant to the midwives' homes : 8 visits of inspection were paid to the 7 Registered Maternity Homes in Dundee.

(6) Two post-graduate lectures were given to the midwives during 1936, on (1) Major and minor difficulties in Ante-natal period and during Labour ; (2) Methods of Birth Control.

The midwives have sent 491 mothers to ante-natal clinics or to private doctors for advice and supervision.

There has been a slight increase in the total number of cases attended by midwives during the year—(1033 as compared with 1027 in 1935).

915 Notifications have been received from midwives as follows :

(1) Application for medical assistance—(a) Mother	...	782
(b) Child	...	72
(2) Notification of death—(a) Mother	...	0
(b) Child	...	0
(3) Notification of stillbirth	...	15
(4) Notification of liability to be a source of infection	...	7
(5) Notification of laying out a dead body	...	0
(6) Notification of artificial feeding	...	7
(7) Notification of patient's failure to follow advice	...	32

There were 32 midwives' patients who refused to follow advice as to obtaining Ante-Natal care, as compared with 10 in 1935.

415 Ante-Natal cases who were not complaining of illness were sent for examination to the Ante-Natal clinic.

Ante-natal (491).

Examinations ...	...	...	415
Varicose Veins...	...	...	17
Purulent Discharges	...	...	14
Excessive Sickness	...	...	9
Albuminuria	...	...	7
Swelling of Feet	...	...	1
Carious Teeth	...	...	5
Pain (various)	...	...	5
Headaches	...	...	3
Constipation	...	...	3
Abortion	...	...	3
Ante-Partum Hæmorrhage	...	...	2
Right Inguinal Hernia	...	...	2
Prolapse of Uterus	...	...	1
Cough	...	...	1
Asthma	...	...	1
Rash	...	...	1
Fainting Attacks	...	...	1

Post-natal (24).

Rise of Temperature	...	...	9
Mastitis...	...	...	3
Phlebitis	...	...	2
Pain (various)	...	...	3
Cracked Nipples	...	...	1
Asthma	...	...	1
Collapse	...	...	1
Difficulty in Micturition	...	...	1
Headache	...	...	1
Advice re Breast Feeding	...	...	1
Unclassified	...	...	1

Labour (267).

Ruptured Perinaeum	...	...	115
Prolonged Labour	...	...	95
Abnormal Presentation	...	...	22
Ante-partum Hæmorrhage	...	...	11
Adherent Placenta	...	...	7
Post-partum Hæmorrhage	...	...	4
Retained Membranes	...	...	3
Exhaustion during Labour	...	...	2
Sickness during Labour	...	...	2
Premature Labour	...	...	2
Intra-Partum Eclampsia	...	...	1
Rigid Perinaeum	...	...	1
Collapse at 1st Stage	...	...	1
Abnormal Vaginal Opening	...	...	1

Infants (72).

Premature or Feeble Infants	...	...	22
Discharging Eyes	...	...	20
Stillbirths	...	...	15
Congenital Defects (various)	...	...	7
Cyanosis	...	...	2
Convulsions	...	...	1
Umbilical Hæmorrhage	...	...	1
Ulcers on Eyelids	...	...	1
Engorged Breasts	...	...	1
Icterus Neonatorum	...	...	1
Unclassified	...	...	1

BIRTHS IN AREA OR DISTRICT.

DUNDEE, 1936.

Total No. of Births during 1936 (uncorrected)	Total No. of Deaths of Newly-Born Children during 1936 (within 10 days)	Actual No. of Births Attended by Midwives during 1936	Actual No. of Deaths of Newly-Born Children occurring in the Practice of Midwives during 1936 (within 10 days of Birth)	Actual No. of Cases not attended at birth by a Doctor or Midwife during 1936
3381	80	1036	13	Births 0 Deaths 0

CASES OF OPHTHALMIA NEONATORUM.

Total No. of Cases during 1936	Actual No. of Cases occurring in the Practice of Midwives during 1936	Actual No. of Cases occurring where Confinement not attended by a Doctor or Midwife during 1936
64	26	0

CASES OF PUERPERAL SEPSIS.

Total No. of Cases during 1936	Total No. of Deaths during 1936	Actual No. of Cases occurring in the Practice of Midwives during 1936	Actual No. of Deaths occurring in the Practice of Midwives during 1936	Actual No. of Cases occurring where Confinement not attended by a Doctor or Midwife during 1936
34	2*	4	0	Cases 0 Deaths 0
(Notifications)				

CASES OF PUERPERAL PYREXIA.

Total No. of Cases during 1936	Total No. of Deaths during 1936	Actual No. of Cases occurring in the Practice of Midwives during 1936	Actual No. of Deaths occurring in the Practice of Midwives during 1936	Actual No. of Cases occurring where Confinement not attended by a Doctor or Midwife during 1936
40	2*	11	1	Cases 0 Deaths 0

CASES OF STILL-BIRTH (DEAD BORN).

Total No. of Cases during 1936	Actual No. of Cases occurring in the Practice of Midwives during 1936
186	36

CASES OF EMERGENCY.

Total No. of Cases of Emergency, in which Medical Practitioners have been called in under Section 22 of the Midwives (Scotland) Act, 1915, during 1936, distinguishing the different cases of emergency

Ante-natal	Labour	Post-natal	Infant	Total
76	267	24	72	439

415 Ante-natal cases who were not complaining of illness, were sent for examination to the Ante-natal Clinics and private Doctors.

*2 cases notified as "Puerperal Sepsis"—Final diagnosis at death :—

2 PUERPERAL SEPTICAEMIA.

*2 cases notified as "Puerperal Pyrexia"—Final diagnosis at death :—

2 PUERPERAL SEPTICAEMIA.

Health Visitors' Work (Maternity Services Only).

To al number of homes visited,	6,673
Total number of visits to these homes,	20,503
Average number of visits per home,	3
Total number of cases visited,	21,288

(a) Routine Visits :—

		1st visits.	Revisits.	Total.
Babies	... ..	2,928	12,414	15,342
Children (1-2)	...	—	5,262	5,262
Mothers, A.N.	...	17	19	36
P.N.	...	10	2	12

(b) Notifiable Diseases and Special Visits.

Ophthalmia Neonatorum	...	...	595
Infantile Diarrhoea	...	...	18
Puerperal Pyrexia	...	...	7
Puerperal Fever	...	...	12
Maternal Deaths Enquiries	...	...	4

Of the 2,928 babies visited for the first time :—

102 were premature

2826 were fulltime births

Of the 2,883 homes of the newly born visited for the first time the home conditions were :—very good, 253 ; good, 1,469 ; medium, 1,025 ; bad, 136.

Special information as to feeding of infants at birth and at 6 months :—

	Breast.	Partly Breast.	Mixed.	Artificial.	Still born.	Dead at first visit.	Total.
At first visit	2,325	76	47	276	129	75	2,928
At 6 months old	413	89	56	271	—	—	829

Ante-Natal Consultations.**1. Central A.N. Clinic.**

REPORT BY MARGARET FAIRLIE, M.B., Ch.B.*

1 Weekly Session of 2 Hours.

(a) Total number of Expectant Mothers attending	...	...	...	...	386
(b) Total number of attendances	...	...	...	...	774
(c) Classified summary of conditions found :—New Cases, 333.					
Advice only	...	...	...	...	301
Not Pregnant	...	...	...	...	1
Conditions due to Pregnancy	...	...	...	...	5
Ante-Partum Hæmorrhage	...	...	...	...	2
Albuminuria	...	...	...	...	1
Vomiting	...	...	...	...	1
Hydramnios	...	...	...	...	1
Conditions aggravated by Pregnancy	...	...	...	...	2
Discharge	...	...	...	...	1
Varicose Veins	...	...	...	...	1
Conditions complicating Pregnancy	...	...	...	...	24
Contracted Pelvis	...	...	...	...	2
Malpresentations	...	...	...	...	13
Displacements	...	...	...	...	2
Various	...	...	...	...	7

(d) Number of Cases :—

	New Cases.	Re-visits.
(1) Referred to Ante-natal Ward	4	13
(2) Referred to Family Doctor	0	0
(3) Treated at Clinic	329	428

Post-Natal and Other Consultations.

(a) Total number of Post-Natal cases attending	...	...	...	...	17
(b) Total number of attendances	...	...	...	...	19
(c) Classified summary of conditions found :—New Cases, 17.					
Advice	...	...	...	...	11
Displacements	...	...	...	...	1
Anæmia	...	...	...	...	1
Various	...	...	...	...	4

(d) Number of Cases :—

	New Cases.	Re-visits.
(1) Referred to D.R.I. ...	3	0
(2) Referred to Family Doctor ...	0	0
(3) Treated at Clinic ...	14	2

2. Polepark A.N. Clinic.

REPORT BY MARGARET SCOTT-DICKSON, M.B., Ch.B., D.P.H.

1 Weekly Session of 2 Hours.

(a) Total number of Expectant Mothers attending	...	192
(b) Total number of attendances	...	330
(c) Classified summary of conditions :—New Cases	...	180
Advice only	...	118
Conditions due to pregnancy	...	16
Albuminuria	...	7
Vomiting	...	7
Haemorrhoids	...	1
Hydramnios	...	1
Conditions aggravated by Pregnancy	...	20
Discharge	...	3
Varix	...	17
Conditions complicating Pregnancy	...	26
Contracted Pelvis	...	7
Malpresentations	...	5
Various	...	14

(d) Number of Cases :—

	New Cases.	Re-visits
(1) Referred to Ante-Natal Ward	2	5
(2) Referred to Family Doctor	0	0
(3) Treated at Clinic	178	145

Post-Natal Consultations.

Only one Post-natal mother attended the Clinic suffering from Amenorrhoea.

(2) Children over 1 year of age.

Of the 108 children between one and five years of age attending the clinics for the first time, 7 (6.5%) showed no disease or congenital defect. The remaining 101 showed 189 diseases or defects, classified as follows:—

Diseases of the digestive system	31
Diseases of the respiratory system...	53
Diseases of nutrition :—	
Rickets	35
Other disorders of Nutrition	13
	— 48
Diseases of the skin	26
Disease of the nervous system	1
Diseases of the eye	8
Diseases of the ear, nose, and throat	6
Congenital defects	21
Surgical conditions	5
Infectious Diseases :—	
German Measles	2
Various	8
	— 189

(3) Mothers.

Only one new Ante-natal case attended the ordinary Clinics suffering from a sprain of the ankle.

22 Post-natal mothers attended the Clinics suffering from the following diseases :—

Diseases of nutrition	15
Surigical conditions	1
Gynecological conditions	1
Genito-urinary diseases	1
Diseases of the digestive system	1
Diseases of the skin	1
Various	2
	— 22

Special Treatment Centres.

A. Dental Clinic.

Report by H. Gordon Campbell, L.R.C.P. & S.E., L.D.S.

(a) Number of attendances : —

(1) Mothers	129
(2) Children	152
	— 281

(b) Classified summary of conditions recorded on admission :—

(1) Mothers—(51.)

Advice only, 1 ; Dental Caries, 33 ; Septic Roots, 2 ;
Gingivitis, 7 ; Tartar, 3 ; Periodontitis, 1 ; Leucoplakia 1 ;
Rash on Tongue, 1 ; Unerrupted Tooth, 1 ; For
Impressions for Artificial Dentures, 1.

(2) Children—(95).

Dental Caries, 55 ; Alveolar Abscess, 26 ; Gingivitis, 3 ;
Tartar, 1 ; Periodontitis, 3 ; Erupting Teeth, 2 ; Septic
Roots, 1 ; Stomatitis, 1 ; Rachitic Teeth 1 ; Stains on
Teeth 2.

(c) Number of Dentures supplied, 1

(d) Gross cost of Dentures supplied ... £5 0s 0d

Sums recovered from patients ... £2 8s 0d

(For Dentures supplied previously).

(e) Classified summary of treatment carried out—(358)

Advice, 34 ; Extractions (temporary) 8 ; (permanent)
110 ; Fillings (temporary) 12 ; (permanent) 9 ;
Treatment of Alveolar Abscess, 45 ; Dressings, 61 ;
Aconite and Iodine treatment, 32 ; Special gum treat-
ment, 17 ; Brushing and Scaling, 27 ; Impressions for
Dentures, 1 ; Repairs to Dentures, 2.

B. Ultra Violet Light Clinic.

Number of Cases.

	New Cases.	From 1935.	Total.	Total Attendances.
Babies ...	60	3	63	947
Children ...	156	49	205	3,543
	216	52	268	4,490

Babies.

	Improved	Not Improved	Not Attending	Still Attending	Total.
Debility ...	6	0	3	2	11
Marasmus ...	4	0	3 (1 Hosp)	0	7
Late Dentition ...	12	0	12	4	8
Rickets ...	4	0	11	1	16
Backward (Mentally) ...	0	0	0	1	1
	26	0	29	8	63

Children.

		Not	Not	Still	
	Improved	Improved	Attending	Attending	Total.
Not thriving	0	0	2	2	4
Debility	35	1	27	6	69
Malnutrition	7	0	5	2	14
Anaemia	0	0	0	1	1
Late Dentition	9	0	8	5	22
Late Walking	3	0	3	1	7
Rickets	30	0	29	15	74
Chronic Bronchitis	6	0	1	0	7
Chronic Adenitis	1	0	1	0	2
Chronic Otorrhoea	1	0	0	0	1
Furunculosis	1	0	0	0	1
Backward (mentally) ..	1	0	1	0	2
Weakness of Leg	1	0	0	0	1
	95	1	77	32	205

Day Nurseries.

(a) Number of attendances :—

(1) Under 1 year of age	...	...	...	...	2,791
(2) Over 1 year of age	...	...	...	...	14,936

(b) Charges made :—

4s. 6d. for 5½ day week for each child, with a reduction of 1s. in the case of 2 members of 1 family, and 2s. a week if 3 members of the same family are attending at the same time.

Food and Milk.

The conditions and arrangements for the supply of food and milk to expectant and nursing mothers and children under five years of age are as follows ;—

All cases are granted on medical recommendation and only to individuals who are attending a Centre. The usual period covered by a grant is one calendar month ; and vouchers are renewed as often as may be necessary, but only after a further medical examination of the person for whom the grant is made.

Expectant mothers are granted free dinners at approved restaurants or a daily supply of milk during the last three months of pregnancy or longer in special cases.

Nursing mothers receive the same for a period of 6—9 months provided they continue to nurse the infant.

The usual amount of milk supplied is one pint each daily to children but mothers may receive more in special cases e.g. albuminuria cases where a milk diet is recommended.

Liquid milk is delivered at the homes or may be fetched by the mothers from approved shops.

Apart from the Home Visitation of the families by the Health Visitors no special steps are taken to ensure the restriction of the use of the milk to the individual for whom it has been granted ; but only on rare occasions are more than two pints per day given to any household, as the experience of the Health Visitors has been that if larger quantities are supplied there is a tendency to waste the milk.

Dried Milk and various supplementary foods are given free to the children attending the clinics on the orders of the Medical Officer or they may be purchased at cost price.

The monetary scale adopted as a basis for consideration of applications for material assistance is that of the local Public Assistance Department.

A Table is appended showing the amount of milk and other foods supplied, and the cost of the same.

Total Quantity Supplied.

Mothers. Children.

No. of Persons Supplied.

Mothers. Children.

Supplied Free.

At Cost Price.

Supplied Free.

At Cost Price.

Total Cost to Local Authority.

Amount Recovered by Local Authority.

Nett Cost.

Liquid Milk ...	2	498	5½	—	12597½	—	£1260	5	3	£1260	5	3
(Grade Pasteurised)			Gallons.		Gallons.							
Dried Milks			Lbs.		Lbs.		£47	2	0	£33	1	6
Ostermilk ...	—	60	—	—	187	441	0	12	10	0	1	10
Benger's Food ...	—	5	—	—	6	1	0	18	2	0	6	2
Allan & Hanbury ...	—	3	—	—	2	4	0	3	4	0	0	0
Horlick's Malted Milk ..	—	1	—	—	2	—						
Other Food Preparations			No.		No.		£116	13	3	—		
Dinners ...	32	—	3111	—	—	—						
Cod Liver Oil and Malt			Lbs.		Lbs.		£120	3	0	£11	2	1
Virol ...	—	396	—	—	4806	133½	12	1	3	5	16	8
Virolax ...	—	140	—	—	11½	70	0	4	0	0	0	8
Roboleine ...	—	90	—	—	1½	½	1	2	4	1	2	4
Chymol ...	—	2	—	—	—	16½	0	1	5	0	1	5
Farex ...	—	8	—	—	—	1	0	2	0	0	2	0
Malto Dextrose ...	—	1	—	—	—	1	0	0	8	—		
Butter } ...	1	—	½ lb.		—	—	0	1	10	—		
Eggs } ...	—	—	1 doz.		—	—						
							£1565	8	0	£52	0	6
							£1513	7	6			

Puerperal Sepsis (34 Cases)

	Notified	Primipara	Multipara	Admitted to Hospital	Nursing Home	Nursed at Home	Recovered	Died
Doctors	15	1	5	5	...	1	6	...
Midwives	...	1	3	4	...	...	4	...
Doctor & Midwife	...	...	...	...	...	...	...	...
Maternity Ward-								
In-patient	17	8	9	13 (KCH) 4 (DRI)	...	...	16	1 (KCH)
Out-patient	2	...	2	2	...	...	2	...
Maternity Home	...	2	2	4	...	...	4	...
Nursing Home	...	1	...	...	1	...	...	1
Maryfield								
Hospital	...	...	...	...	...	...	...	...
Totals	34	13	21	32	1	1	32	2

RECOVERED DIED
Primipara. Multipara. Primipara. Multipara

Where delivered : —

Home	...	2	8	...	...
Maternity Ward D.R.I.					
In-patients	...	6	9	1	...
Out-patients	...	1	2	...	...
Maternity Home	...	2	2	...	...
Nursing Home	...	...	...	1	...
		11	21	2	...

Where treated :—

Home	...	1	...	...	...
D.R.I.	...	2	2	...	...
King's Cross Hospital	...	8	19	1	...
Nursing Home	...	...	...	1	...
		11	21	2	...

Of the cases which recovered the home conditions were good in 24, bad in 6, and not known in 2 ; and of the cases which died, the home conditions were good in 2.

PARTICULARS OF CASES.

Primipara.	Recovered.	Died.	Total.
Normal Confinements	4	...	4
Normal Confinements ;			
Ruptured Perinaeum	2	...	2
Instrumental delivery ;			
Ruptured Perinaeum	2	...	2
Instrumental delivery ;			
Albuminuria	1	...	1
Instrumental delivery ;			
Ante-partum Haemorrhage	1	...	1

Instrumental delivery ;						
Laceration of Cervix	....	1	1			
Complicated Breech Delivery ;						
Adherent Placenta ;						
Albuminuria	... ..	1	1			
Abortion	...	1	1	11	2	13

Multipara.	Recovered.	Died.	Total.			
Normal Confinements...	9	....	9			
Normal Confinements ; Ruptured Perinaeum	1	....	1			
Albuminuria ; Normal Confinement ...	1	...	1			
Instrumental Delivery	3	...	3			
Adherent Placenta	1	....	1			
Placenta Praevia ...	1	....	1			
Abortion	5	...	5	21	0	21

Puerperal Pyrexia (40 Cases).

	Notified	Primipara	Multipara	Admitted to Hospital	Nursing Home	Nursed at Home	Recovered	Died
Doctor	24	1	2	1	—	2	3	—
Midwives	—	1	5	6	—	—	6	—
Doctor and Midwife	—	5	2	6	—	1	6	1
Maternity Ward, I.P.	16	8	6	14	—	—	14	—
O.P.	—	—	5	5	—	—	4	1
Maternity Home	—	5	—	4	1	—	5	—
Nursing Home	—	—	—	—	—	—	—	—
Maryfield Hospital	—	—	—	—	—	—	—	—
	40	20	20	36	1	3	38	2

Where Delivered.	Recovered.		Died.	
	Primipara.	Multipara.	Primipara.	Multipara.
Home	6	14	1	1
Maternity Ward, D.R.I.				
I.P.	8	5	—	—
O.P.	—	—	—	—
Maternity Home	5	—	—	—
	19	19	1	1

Where Treated.

Home	2	1	—	—
D.R.I.	—	—	—	—
King's Cross Hospital	16 + 1*	18	1	1
Maternity Home ...	1	—	—	—
	19 + 1*	19	1	1

Of the cases which recovered, the home conditions were good in 29; bad in 7, and not known in 2; and of the cases which died, the home conditions were good in 2.

* Notified 1935. Removed to Hospital 1936.

PARTICULARS OF CASES.

Primipara.	Recovered.	Died.	Total.			
Normal Confinements...	9	...	9			
Normal Confinements ; Ruptured Perinaeum	3	...	3			
Normal Confinements ; Albuminuria ...	1	...	1			
Normal Confinements ; Ante-partum Haemorrhage	1	...	1			
Instrumental Delivery	2	...	2			
Instrumental Delivery ; Ruptured Perinaeum	2	1	3			
Instrumental Delivery ; Albuminuria	1	...	1	19	1	20
Multipara.	Recovered.	Died.	Total.			
Normal Confinements	13	1	14			
Normal Confinement ; Ante- Partum Haemorrhage	1	....	1			
Normal Confinements ; Cystocele	1	...	1			
Normal Confinements ; Retained Placenta	2	...	2			
Instrumental Delivery	2	...	2	19	1	20

One case had been notified as Puerperal Pyrexia, in which the cause of death was Puerperal Sepsis.

8 cases of Puerperal Fever and 8 cases of Puerperal Pyrexia followed instrumental delivery. There were 3 deaths from Puerperal Fever.

Number of cases of Puerperal Fever and Puerperal Pyrexia where

the Local Authority provided assistance on the request of the Medical Practitioner for :—

(i.) Consultant Service	...	...	...	0
(ii.) Bacteriological Examinations	...	...	...	0
(iii.) Skilled Nursing at Home	...	...	...	0
(iv.) Hospital Treatment	...	...	...	68

Notifications were sent promptly ; and, in the majority of cases the opportunity of removal to Hospital for treatment was taken advantage of immediately.

Ophthalmia Neonatorum.

	Doctors	Midwives	Doctor and Midwife	Mat. Hosp. In-Pat.	Mat. Hosp. Out-Pat.	Maryfield Hospital.	Maternity Home.	M. S. Dept.	Eye Institution	No Attendant	Total.
By whom notified...	33	6	1	2	2	2	1	17	—	—	64
By whom attended	4	22	4	14	7	4	9	—	—	—	64
Total No. of Births attended in 1936	406	825	213	1687		74	382	—	—	—	3587

Treated in Institutions	In Hospital	Treated at Home	Type of Case		Result						
			Severe	Mild	Complete Recovery	Injury to Sight	Died during Treatment	Left Town during treatment	Not Visited	Initial Visits	Re-visits
King's Cross H. 14	}	50	14	50	62	—	2	—	6	58	537
Maryfield H.											
Dundee R. In.											

Of the 14 severe cases—1 was attended by Doctor at birth ; 1 by Doctor and Midwife ; 4 by Midwife ; 4 in Maternity Home ; 2 in Maternity Dept., D.R.I. ; and 2 in Maryfield Hospital.

Smears were taken in 48 cases. 2 were positive ; 8 were suggestive ; 38 were negative.

In 16 cases smears were not obtained, 14 were in institutions, and 2 were clear at first visit.

In no case was there any loss of vision.

*One other case notified in 1935 was admitted to King's Cross Hospital for treatment in 1936.

Rickets.

13 infants under one year showed clinical signs of commencing Rickets.

Two of these cases were under 6 months, the others being between 6 months and 1 year. Their feeding was as follows :—
entirely breast fed, 7 ; breast fed for 3 months, then on fresh cow's milk, 1 ; fed from birth on breast and artificial food, 1 ; fed on artificial food, 4.

Of the 108 children admitted between the ages of 1 and 5 years 35 (32%) showed some signs of clinical rickets on admission.

All these children were under 2 years of age and enquiries as to the feeding from birth elicited the following information :—

Breast fed for less than 1 year	...	12 out of a total of	36
Breast fed for over one year	...	5 out of a total of	14
Partly Breast fed (for a few months only)		14 out of a total of	31
Fed on fresh cow's milk	...	4 out of a total of	19
Fed on artificial food	...	0 out of a total of	8

Deaths from Infantile Diarrhoea.

14 deaths occurred from infantile diarrhoea during 1936.

Of these 4 were breast fed ; 1 was partly breast fed ; 9 were artificially fed.

With reference to feeding, the ages at which these infants died were as follows :

	1st Mnth.	2nd Mnth.	3rd Mnth.	4th Mnth.	5th Mnth.	6th Mnth.	7th Mnth.	8th Mnth.	9-12 Mnth.	Tl.
Breast ...	1	0	0	1	1	1	0	0	0	4
Partly Breast ...	0	0	0	0	0	0	0	0	1	1
Mixed ...	0	0	0	0	0	0	0	0	0	0
Artificial ...	1	0	0	2	1	0	0	0	5	9
Totals ...	2	0	0	3	2	1	0	0	6	14

Of the 14 deaths from infantile diarrhoea in which particulars were obtained :—

3 occurred in houses of one room, in which there were 11 occupants

6 occurred in houses of two rooms, in which there were 38 occupants.

3 occurred in houses of three rooms, in which there were 18 occupants.

2 occurred in houses of four rooms in which there were 20 occupants.

The family history showed that in these families :—

39 were still alive.

18 had died in the first year of life.

None of the mothers worked outside their own homes.

Voluntary Agencies.

DUNDEE VOLUNTARY HEALTH WORKERS' ASSOCIATION.

During the year 400 knitted garments and 381 sewn garments were made by the members of the Association for the clinics ; and 420 were provided for the Day Nurseries.

662 garments supplied by the Association were distributed at the clinics. Of these 167 were sold at cost price, 7 at half cost price, 429 at quarter cost price, and 59 were given free on the recommendation of the Medical Officer.

The following voluntary institutions are also associated with the Scheme, and receive an annual grant from the Dundee Town Council :—

(1) SALVATION ARMY HOME.

Report of the Maternity Home—Florence Booth House, Clement Park, Lochee.

Number of non-paying cases in the Home on	
January 1st, 1936	30
Number of non-paying cases admitted during 1936	36
Number of cases confined in the Home during 1936	33
Number of days in the Home during 1936	10,074

(2) ST. RONAN'S HOME.

This is a Preventative and Rescue Home which admits pregnant and nursing women.

Number of cases in the Home on January 1st, 1936	9
Number of cases admitted during 1936	31
Number of days in the Home during 1936	1830

(3) LOCHEE DAY NURSERY.

Number of new cases admitted :—

Under 1 year of age	10
Over 1 year of age	24

Total attendances :—

Under 1 year of age	612
Over 1 year of age	4,129

(4) NURSERY SCHOOL.

Number of children admitted in 1936	43
Re-admitted, from 1935	15
Average number on Roll	45
Total number of attendances in 1936	6,997
Infant Department :—	
Number on Roll	6
Total number of attendances in 1936...	860

PRE-SCHOOL AND SCHOOL MEDICAL SERVICES.

Report by DR. A. E. KIDD,
Chief School Medical Officer.

DUNDEE,
August, 1937.

I HAVE the honour to submit for your consideration a report on the work of the Pre-School and School Medical Services for the year ending 31st July, 1937.

Number of schools under inspection	....	....	....	44
Average number of children on roll for the past session	....	27,996		
Percentage of average attendance for the whole year	....	88.55		

Staff.

During the past session Miss Margaret Ritchie was appointed to the Dental Staff and an additional Health Visitor was also added to the general staff.

Mrs Lindsay on being appointed to the Matronship of North George Street Day Nursery left Isles Lane Clinic and another Health Visitor was appointed to the staff,

The following Health Visitors resigned during the session namely, Nurses Fyall ; Mary Stewart ; Winifred Stewart and Clark and the following Health Visitors joined the service namely : Nurses Ferguson ; Hannah ; Gove ; Suttie ; Braithwaite ; Shiell.

Summary of Year's Work.

Attendance at Treatment Clinics	....	....	....	53,729
Examinations for Attendance Certificates	....	....	....	25,652
Routine Examinations in schools	....	....	....	10,035
Special Examinations in schools	....	....	....	2,530
Examination as to " fitness " for employment	...	...	...	717
Nurses' Visits to schools	....	....	....	1,563
Doctors' Visits to schools	....	....	....	464
Attendance at Cleansing Station	....	....	....	4,281
Children inspected before going to Holiday Homes, Camps etc.	1,789			
Examinations under the Children and Young Persons (Scotland) Act, 1932	...	...	...	79

New Schools and Alterations in Schools.

During the past session a new school has been opened at Mid-Craigie—extensions at Rockwell Primary and St. Peter and Paul School have been completed and are now occupied.

The rebuilding of St Mary's (Lochee) School is at present in progress and a commencement has been made at St. Michael's School,

Alterations and renovations have been carried out as follows :

1. Reflooring in 15 Schools,
2. Repainting in 12 Schools.
3. A new heating boiler was installed in the Western School and new domestic hot water supplies provided in Clepington, Tay Street and Rosebank Schools.
4. Wallacetown and Hill Street Schools were redressed and concrete has been laid in the St. John's School playground.
5. New Latrines are in process of erection at St. Mary's (Forebank) School.
6. Shelters at Grove and Hawkhill have been re-roofed and minor alterations and renovations have been carried out in other schools.
7. Plans have been passed for the erection of a Nursery School in Cotton Road.

Organisation and Administration.

No alterations in the organisation as set forth on pages 157-158 1936 report have been made.

The co-operation with the Juvenile Employment Centre continues to be as close as formerly—much valuable information passes between the two departments and the Unemployment Assistance Board and the Labour Exchange have also been most helpful in their co-operation in our work. It is only with this willing co-operation that the rapid transfer of information, allowing of assistance and relief, can be carried out.

Health Visitors.

During the past session the Health Visitors have carried out visits to Pre-school and School Children as follows :—

Infectious Disease	....	...	...	2410
Tuberculosis	...	...	...	2480

Visits to children found defective :—

Age 1-5...	....	...	...	422
Over 5	...	...	...	2303

Re-visits to such cases :—

Age 1-5...	...	...	...	1604
Over 5	...	...	...	6338

15607

Total number of 1-5 children visited by H.V.....	...	4279
Total number of visits paid to 1-5 children	...	7948
Schools visited by Health Visitors	...	1563
Homes of Pre-school and School Children visited by Health Visitors	...	12668

The regular visits to school by the Health Visitors is now an established custom. These visits are welcomed, and are an excellent means of following up cases.

As the Health Visitor who visits a school is also the Health Visitor visiting the homes of children attending that school then if the notice calling attention to a defect has been ignored the Health Visitor can make a special visit to the home and point out to the parents the necessity for treatment.

Supervision of Infectious Disease.

During the past session certificates for exclusion from school on account of infectious disease have been issued to the number of 8,232.

Mumps from October 1936 to April 1937 accounted for a considerable number of non-attendances, while whooping cough was prevalent from December, 1936, to March, 1937, the peak period being February.

Notification of infectious disease cannot be neglected as it is only by early notification that preventive measures can be taken to prevent spreading of the trouble, once the disease is established other administrative measures are indicated.

Cleansing Station.

The number in attendance during the past session was 4,281.

Presence of Parents at Inspection.

5,365 parents attended inspections of their children.

In some cases parents do not bother to attend inspections. They tell their nurse anything they may wish the Medical Officer to know, and understand that should anything abnormal be found the nurse will come and advise them as to the proper procedure to be carried out.

The attendance of parents at inspection has one great benefit in that in many cases pre-school children are brought along, and it is an excellent opportunity of ascertaining any abnormality requiring correction before the child commences its school life.

For these reasons among others, every encouragement should be given to the attendance of parents at inspection whether they may be in school or clinic.

Physical Condition of School Children.

(1) ROUTINE EXAMINATIONS.

Boys ...	...	...	...	...	...	5,085
Girls	4,950
Boys and Girls	10,035

(2) SPECIAL EXAMINATIONS

Boys and Girls	2,530
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(3) EXAMINATIONS AS TO "FITNESS" FOR EMPLOYMENT.

Boys	570
Girls	147
Boys and Girls	717

The following table of Heights and Weights indicates the average height and weight of Boys and Girls during the first period of medical inspection in Dundee compared with the period 1926-1937.

In addition the maximum and minimum height and weight for each age in the last group have been given.

BOYS—

age	Height				Weight			
	Average 1910-26	Average 1926-37	Max.	Min.	Average 1910-26	Average 1926-37	Max.	Min.
4	39.47	39.99	46	33	31.11	37.89	53	27
5	41.25	41.54	51	33	39.85	39.67	61	21
6	43.35	44.18	52	35	43.13	44.24	68	30
7	45.50	45.86	59	36	47.55	48.02	90	30
8	46.72	47.78	58	40	49.87	52.55	85	34
9	48.39	50.71	61	41	54.95	57.25	107	39
10	50.91	51.59	61	42	60.98	62.74	146	40
11	52.27	53.58	62	44	64.46	69.57	137	45
12	54.76	57.22	66	45	72.24	75.02	175	46
13	56.02	57.33	70	48	77.26	82.55	157	49
14	58.65	58.86	73	50	89.06	89.52	168	56

GIRLS—

4	39.10	39.32	47	28	35.46	36.01	52	24
5	40.95	41.39	50	29	38.17	38.57	59	23
6	42.84	44.47	53	32	41.56	42.66	74	28
7	45.32	45.75	60	33	46.17	46.99	78	28
8	46.03	47.62	59	39	48.71	50.33	85	30
9	48.45	49.92	59	39	53.04	54.70	98	37
10	50.80	50.77	60	44	59.14	60.51	101	42
11	52.80	54.23	64	46	64.03	69.94	150	41
12	55.11	56.41	67	46	72.79	77.55	162	42
13	57.06	58.94	69	46	80.04	88.07	182	49
14	59.46	60.85	67	51	91.39	93.21	172	55

Clothing.

	Boys.	%	Girls.	%	Boys & Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Satisfactory ...	5,085	100	4,949	99	10,034	99
Unsatisfactory ...	—	—	1	—	1	—
In need of repair ...	24	—	12	—	36	—
Clothing dirty ...	14	—	7	—	21	—

Footgear.

Number examined ...	5,085	—	4,950	—	10,035	—
Satisfactory ...	5,071	99	4,944	99	10,015	99
Unsatisfactory ...	14	—	6	—	20	—
Barefoot ...	—	—	—	—	—	—

Cleanliness of Head.

	Boys	%	Girls.	%	Boys & Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Vermin ...	6	—	35	1	41	—
Nits ...	35	—	472	9	507	5
Clean ...	5,067	99	4,924	9	9,991	99

Percentage for 1927-28.

Vermin ...	—	1	1
Nits ...	3	15	9
Clean	98	98	98

Percentage for 1932-33.

Vermin	—	1	1
Nits ...	1	9	5
Clean ...	99	99	99

Cleanliness of Body.

	Boys.	%	Girls.	%	Boys & Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Vermin ...	4	—	6	—	10	—
Vermin marked ...	99	1	109	2	208	2
Clean ...	5,067	99	4,937	99	10,004	99

Percentage for 1927-28.

Vermin ...	2	1	1
Vermin marked	6	5	5
Clean ...	97	98	97

Percentage for 1932-33.

Vermin ...	—	—	—
Vermin marked	4	4	4
Clean ...	99	99	99

The problem of vermin on head, body and clothing is a matter for constant attention ; in the majority of cases care is taken that there is no spreading of the condition to other members of the family but it is with regret that one records the fact that in some cases treatment is relaxed or stopped too soon.

This can only result in repeated outbreaks and it is a pity that due to the apathy and neglect of a small percentage the larger numbers of households should be subjected to possible infection.

There still lingers in the minds of those few the idea that nits are of no consequence and even in some cases they do not associate nits with vermin.

Time and again children are presented for examination before going to a holiday home or camp and have to be rejected on account of the presence of nits in the hair notwithstanding the definite statement on the card that no children will be accepted for admission to the home unless they are free from vermin.

One feels reluctant at this period of Medical Inspection to suggest that the wording of cards calling children for examination should definitely state that the presence of vermin or nits will be a cause of rejection.

Only by doing so can holiday homes and camps be safeguarded and careful parents saved the worry of having their children infected from those of careless parents.

Condition of Skin.

	Boys.	%	Girls.	%	Boys & Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Head—						
Ringworm... ..	—	—	—	—	—	—
Impetigo	111	2	100	2	211	2
Favus	—	—	—	—	—	—
Other diseases ...	46	1	36	1	82	1

Body—

Ringworm... ..	1	—	1	—	2	—
Impetigo	94	1	100	2	194	2
Scabies	3	—	4	—	7	—
Other diseases ...	59	1	64	1	123	1

Nutrition.

Number examined ...	5,085	—	4,950	—	10,035	—
Above average ...	1,663	33	1,692	34	3,355	33
Average	3,031	60	2,779	56	5,810	58
Below average ...	362	7	440	9	802	8
Very bad	29	—	39	1	68	1

	Boys.	%	Girls.	%	Boys and Girls.	%
Percentage for 1927-28						
Above average		31		30		31
Average		63		61		62
Below average		5		4		4
Very bad		—		—		—

Percentage for 1932 33						
Above average		26		27		26
Average ...		66		63		65
Below Average		7		9		8
Very Bad ...		1		1		1

The number of children taking milk has been somewhat over $\frac{1}{3}$ of the number of children on the roll. I would again wish to point out that the giving of milk earlier in the morning and not at the 11 o'clock interval would obviate the objection of some children to take milk as milk taken at 11 'clock prevents them taking a proper mid day meal.

Further the giving of the milk earlier in the day would certainly benefit those children who have come to school after a scanty or ill-chosen breakfast.

Changes in the mid-day meals have been made with the object of providing a better and more balanced meal ; this alteration was appreciated by the children partaking.

Teeth.

	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Perfect	180	4	193	4	373	4
Sound	862	17	763	15	1,625	16
1-4 decayed	2,699	53	2,727	55	5,426	54
5 or more decayed ...	1,344	26	1,267	26	2,611	26
Oral sepsis	229	5	264	5	493	5

A matter for regret is the necessity to have to record a disinclination on the part of many to accept dental treatment and even after an appointment has been made a considerable number fail to attend.

Nose and Throat.

	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Nose—						
Catarrh ...	450	9	333	7	783	8
Obstruction ...	28	—	12	—	40	—
Other diseases ...	10	—	11	—	21	—
Throat—						
a) Tonsils—						
Slightly enlarged	672	13	736	15	1,408	14
Much enlarged	195	4	185	4	380	4
(b) Adenoids—						
Probably present	174	3	151	3	325	3
Present ...	37	—	31	—	68	1
(c) Other diseases	72	1	15	—	87	1
Glands—						
Number examined ...	5,085	—	4,950	—	10,035	—
Submaxillary—						
Enlarged ...	799	16	677	14	1,476	15
Much enlarged	13	—	11	—	24	—
Suppurating	—	—	—	—	—	—
Cicatrices ...	44	1	40	1	84	1
Cervical—						
Enlarged ...	419	8	360	7	779	8
Much enlarged	5	—	7	—	12	—
Suppurating ...	—	—	—	—	—	—
Cicatrices ...	42	1	41	1	83	1
Mouth Breathers ...	285	6	222	5	507	5

External Eye Disease.

	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Strabismus ...	189	4	188	4	377	4
Nystagmus ...	2	—	4	—	6	—
Blepharitis ...	159	3	183	4	342	3
Conjunctivitis ...	112	2	93	2	205	2
Corneal Nebulae ...	10	—	6	—	16	—
Corneal Ulcer ...	—	—	1	—	1	—
Other diseases ...	29	—	25	—	54	—

The institution of an orthoptic clinic will benefit cases of squint found not only in school life but also among pre-school children.

These pre-school children will be able to commence their school life with this unsightly defect of vision corrected.

Too often we meet with disinclination to have anything done for squints. The old idea that the squinting eye will come straight through time still exists, and those people who hold this idea are difficult to persuade that the squinting which "comes straight" through time only becomes straight as a "blind eye" and so restricts the earning power of the young person.

To get such narrow-minded persons to understand that with time the squinting eye degenerates, and that the power of vision is lost owing to lack of use, is very difficult. The child with a squint sees double and knowing the direction and the object they desire to see they neglect the image seen by the squinting eye with this result, defective vision.

The institution of the orthoptic clinic will be of the very greatest benefit to such children, and if we can get the children early enough one should see this percentage of squint, which has remained at much the same figure for some years, reduced and so allow many children to start their school career unhampered by defective vision.

In connection with vision another important fact should be recorded. In the manual training departments it is sometimes noted that certain boys turn out inferior work, such as open joints, mortice and tenon badly made, inability to saw straight, hesitancy in placing saw or chisel on a definite spot. These boys are sometimes considered as "handless" "having no turn for handwork" when the real cause of the trouble is often defective vision.

There may be some difference in the power of vision in the two eyes, in ability to see clearly near at hand, or occasionally a boy may be found doing near work while he wears glasses which have been prescribed for distant vision. All such cases are carefully examined and reported on by the ophthalmic surgeon in consultation with the School Medical Staff.

Correcting glasses may be required and posture habits learned so that a boy who would otherwise have become an indifferent tradesman may go out into the world with his vision properly corrected. At the same time, boys who would be unfitted to work among machinery are discovered and may thus be saved the risk of entering an unsuitable occupation.

Visual Acuity.

6/6 indicates that at a distance of 20 feet a child can see letters.
6/16 inch in size.

6/9 letters 8/16 " " "

6/12 " 11/16 " " "

6/18 " 17/16 " " "

	Boys.		Girls.		Boys and Girls.	
	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	3,782	—	3,551	—	7,333	—
6/6 ...	2,862	76	2,717	77	5,579	76
6/9-6/12 ...	441	12	490	14	931	13
6/18 or worse ...	479	12	344	9	823	11

The number of cases of defect of vision requiring refraction and correction by means of the provision of glasses has now risen to such a total that the question of providing further attendance by the ophthalmic surgeon should be considered.

There is an ebb and flow of these cases and often the waiting list is so large that cases can only be attended to some weeks after they have been notified. There is not now such a disinclination to the wearing of spectacles and pre school children are being brought more freely for correction of visual defects.

Ears.

	Boys.		Girls.		Boys and Girls.	
	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Otorrhoea ...	63	1	31	—	94	—
Wax ...	152	3	158	3	310	3
Other diseases ...	5	—	4	—	10	—

	Boys.	%	Girls.	%	Boys and Girls.	%
Hearing.						
Number examined ...	5,085	—	4,950	—	10,035	—
Somewhat deaf ...	45	1	23	—	68	1
Markedly deaf ...	2	—	1	—	3	—
Speech.						
Number examined ...	5,085	—	4,950	—	10,035	—
Defective articulation ...	45	1	31	—	76	1
Stammer ...	25	—	11	—	36	—
Retarded Condition.						
Number examined ...	5,085	—	4,950	—	10,035	—
" Retarded " ...	23	—	3	—	26	—
Heart and Circulation.						
Number examined ...	5,085	—	4,950	—	10,035	—
Organic—						
Congenital ...	2	—	2	—	4	—
Acquired ...	10	—	22	—	32	—
Functional ...	26	—	40	1	66	1
Anaemia ...	453	9	403	8	856	9
Percentage for 1927-28.						
Anaemia ...		6		5		5
Percentage for 1932-33.						
Anaemia ...		8		9		9
Lungs.						
Number examined ...	5,085	—	4,950	—	10,035	—
Bronchitis ...	218	4	182	4	400	4
Tuberculosis ...	4	—	2	—	6	—
? Tuberculosis ...	23	—	20	—	43	—
Other diseases ...	20	—	20	—	40	—
Nervous System.						
Number examined ...	5,085	—	4,950	—	10,035	—
Epilepsy ...	—	—	—	—	—	—
Chorea ...	3	—	3	—	6	—
Infantile Paralysis ...	3	—	—	—	3	—
Other diseases ...	1	—	1	—	2	—

Tuberculosis (Non-Pulmonary).

	Boys.		Girls.		Boys and Girls.	
	Boys.	%	Girls.	%	Boys and Girls.	%
Number examined ...	5,085	—	4,950	—	10,035	—
Glandular ...	6	—	3	—	9	—
Bones and Joints ...	7	—	4	—	11	—
Abdominal ...	3	—	2	—	5	—
Skin ...	—	—	—	—	—	—
Other forms ...	—	—	—	—	—	—

Deformities.

Number examined ...	5,085	—	4,950	—	10,035	—
Bow Leg ...	17	—	9	—	26	—
Knock Knee ...	12	—	19	—	31	—
Cleft Palate ...	—	—	3	—	3	—
Spinal Curvature ...	5	—	4	—	9	—
Rickety Chest ...	81	1	25	—	106	2
Wry Neck ...	5	—	6	—	11	—
Club Foot ...	—	—	1	—	1	—
Congenita ¹ ...	7	—	7	—	14	—
Acquired (non-rachitic)	9	—	6	—	15	—

Rickets.

Number examined ...	5,085	—	4,950	—	10,035	—
Slight... ...	102	2	52	1	154	2
Marked ...	25	—	9	—	34	—

OTHER DISEASES	38	1	24	—	62	1
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Result of Inspection.

Number examined ...	5,085	—	4,950	—	10,035	—
Fit ...	4,496	89	4,396	90	8,892	88
Defective (excluding verminous cases) ...	589	11	554	10	1,143	12

Percentage for 1927-28.

Fit ...	89	88	88
Defective ...	11	12	12

Percentage for 1932-33.

Fit ...	91	90	90
Defective ...	9	10	10

Arrangements for Medical Treatment.

Summary of attendance at Treatment Clinics

Total attendances at all clinics... .. 87,968

(1) *Central Clinic (Nelson Street).*

Dental	...	...	...	...	...	...	3,920
Skin and X-ray	...	...	...	...	...	...	11,974
Ear, Nose and Throat	...	...	...	...	...	...	8,622
Eye	...	...	...	...	...	...	13,333
General	...	...	...	...	...	...	15,880

Total attendances 53,729

Total number of children who have attended the Central Clinic:—

(a) Off school	...	...	...	...	...	2,382
(b) Attending school	...	...	...	...	...	5,699

8,081

Average attendance per child (days)	....	...	...	7
Average daily attendance	...	..	...	180
Cases sent by Headmasters, Doctors	...	...	14,115	
Health Visitors, Attendance Officers	...	...	1,169	
Return Cases	...	...	...	9,151

(2) *Broughty Ferry Clinic.*

Eyes	...	...	....	....	...	85
Ears	...	....	....	....	...	40
General	...	...	....	...	....	495

620

Cases sent by Headmasters	...	....	...	....	387
Return Cases	....	...	....	...	532
Pre-school Children	....	...	...	...	49

(3) *Ferry Road Clinic.*

Eyes	...	....	...	....	...	721
Ears	....	....	...	...	...	575
General	....	....	...	...	...	3,887

5,183

Cases sent by Headmasters	...	....	...	...	601
Return Cases	....	...	....	...	1,268
Pre-school Children	...	...	....	...	153

(4) *Lochee Clinic.*

Eyes	...	...	...	...	...	...	1,496
Ears	...	...	...	...	...	...	1,347
General	...	...	...	...	...	...	5,891
							<hr/>
							8,734

Cases sent by Headmasters	...	...	...	...	...	...	1,954
Return Cases	...	...	...	...	...	...	1,689
Pre-school Children	...	...	...	...	...	...	199

(5) *Isles' Lane Clinic.*

Eyes	...	...	...	...	...	...	1,843
Ears	...	...	...	...	...	...	1,212
General	...	...	...	...	...	...	7,370
							<hr/>
							10,425

Cases sent by Headmasters	...	...	...	...	...	...	1,662
Return Cases	...	...	...	...	...	...	2,549
Pre-school Children	...	...	...	...	...	...	239

(6) *"Sun" Clinics at Nelson Street
and Lochee Clinic.*

	Boys	Girls	Boys and Girls.
Age 2-5 attendances	737	995	1,732
Age 5 and over attendances	3,682	3,883	7,565
			<hr/>
			9,297

Total Attendances at Clinics.

Nelson Street	...	...	...	...	...	53,729
Broughty Ferry	...	...	...	...	...	620
Ferry Road	...	...	...	...	...	5,183
Lochee	...	...	...	...	...	8,734
Isles' Lane	...	...	...	...	...	10,425
"Sun" Clinics	...	...	...	...	...	9,297
						<hr/>
Total						87,988

Total Number of Children who have attended Clinics.

Nelson Street	...	...	...	...	...	8,081
Broughty Ferry	...	...	...	...	...	387
Ferry Road	...	...	...	...	...	601
Lochee	...	...	...	...	...	1,954
Isles' Lane	...	...	...	...	...	1,662
" Pre-school "	...	...	...	...	...	2,372
Total						15,057

The construction of a new clinic in the North End of the City will fill a long felt want—it will prevent the long journeys some parents now have to the Central or other clinics and as accomodation is also to be provided for dental treatment in this Clinic this will allow of extended facilities for the dental care and supervision of the children in the area.

Arrangements for Physical Training.

The continued close co-operation between Mr Forbes, Director of Physical Education, and his staff with the School Medical Services is a very marked feature in the organisation of our work.

Time and again special cases are presented to the physical training staff for remedial treatment and advice. Careful watch is kept upon such cases, and during the past session we are much indebted for the very careful treatment which has been carried out resulting in cases which formerly would have had to go through their school life marked as unfit can now take their place with others in the general activities of the school.

Teaching of Hygiene.

The use of the film might well be extended in the teaching of good posture, balance and personal hygiene. The introduction of " ring films " has provided a long-felt want in teaching, and as with each year the number of suitable " ring films " is increasing, the scope of such teaching has become much wider.

Dr Imrie has again conducted a First-Aid Class. Certificates of proficiency were obtained by many while others gained the Medallion of the St Andrew's Ambulance Association. The number of persons who are in possession of a " First Aid " certificate has increased during the past two years, and in every school there are now individuals trained and fit to render assistance in any accident or emergency.

Special Schools and Classes.

Fairmuir.

The accommodation at Fairmuir Special School has again been taxed to its utmost, and there is a considerable waiting list.

114 children in this school have received "Sun" treatment, and the opinion of all concerned is that it has proved to be of benefit in that the children have become brighter and more alert.

The training of the younger children on the retarded side in health matters has produced very good results—these young children now attend to themselves at dinner time, assist in the laying of tables, serving and clearing up after the meal. Self-reliance and manual dexterity have been developed, and children who formerly were unable to do much for themselves can now control and help themselves.

The workshop is of the greatest benefit to the pupils in this school. Under careful guidance the manual training is making handless pupils into children accustomed to the use of tools and able to contrive and make useful articles.

Again the School Medical Staff have to thank Mr Forbes and his assistants for their cordial co-operation in the orthopaedic work in this school. The pupils requiring such treatment are arranged in groups, and each group receive the appropriate treatment in accordance with the disability present.

The School for the Deaf, the Sight-Saving School and the School at Auchterhouse and the Sidlaw Sanatorium all continue their good work.

"Pre-School" Attendances.

This department of the work shows a marked increase in attendances, 2,370 as against 1,349 last session. This total of 2,370 represents over one-quarter of the total of 2-5 children in the city.

The Health Visitors in their daily rounds come in contact with these young children and, on noting any abnormality, can recommend attendance at one or other of the various clinics, and if necessary make a special appointment so that a mother is not kept waiting should there be other young children in the home.

Defects of vision, squint, "hard of hearing," "slow in speaking," "easily knocked over," "loss of power in arms or legs" have all been reasons for bringing pre-school children to one or other of the clinics for advice and, if necessary, treatment.

The establishment of a nursery school will be the forming of another link in the protective chain which one seeks to establish for these pre-school children.

The establishment of an orthopaedic clinic will be of very great assistance in the treatment of those cases of "loss of power in legs or arms" which are discovered in the 2-5 period—many of these formerly, were not found until they arrived in school, and in some cases the condition had lasted so long that it was extremely difficult to obtain any improvement in the condition.

Treatment Centres.

No change has been made in the organisation or working on these clinics.

Children and Young Persons (Scotland) Act, 1932.

570 boys and 147 girls were examined as to their fitness to undertake employment in accordance with the Bye-Laws regarding the Employment of Children.

79 cases were examined as to their fitness for transfer to an approved school.

Summary of Attendance Certificates Granted at Clinics.

Total number of certificates issued 18,583

(a) Unfit to attend school—

	Four Weeks.	Three Weeks.	Two Weeks.	One Week.
Clinic cases	3	2	101	2,149
Non-clinic cases	212	242	1,177	3,216
Total Clinic cases ... ..	...	...	2,255	
Total Non-Clinic Cases ... ..	...	...	4,847	
				7,102

(b) Fit to attend School.

Clinic cases ... ..	...	5,856	
Non-Clinic cases ... ..	...	5,625	
			11,481
Total	....		18,583

DENTAL OFFICERS' REPORT, 1936-37

Sir,

We beg to submit the Annual Report for the year ending 30th June, 1937.

The Dental Services Scheme as carried out in the two divisions of this urban area comprises: —

- (a) *Routine Inspection* at various schools of children of the ages 6-8 years inclusive, for the selection of those cases whose first permanent molars show early decay, a stage suitable for easy and permanent fillings. These teeth, the first of the second dentition to erupt, if neglected, are responsible for much suffering and ill-health, to wit, abscess of the jaw and enlarged glands of the neck.
- (b) *Treatment of Pre-School Children* submitted by Medical Officers.
- (c) *Casual Attendances of School Children* of all ages submitted by Medical Officers, Specialists, Head Teachers, and Attendance Officers for advice and treatment of diseases of the mouth including the teeth.

Treatment is carried out in the clinic at Nelson Street, the morning session being reserved as far as possible for conservative work for routine cases selected at schools.

Routine Inspection.

The following schools were visited:—

Victoria Road, Tay Street, St Andrew's (Boys), St Andrews' (Girls), Hawkhill, St Joseph's (Boys), St Joseph's (Girls), Glebelands, St Patricks, Mains.

The number inspected were 1,725, 621 being selected for the filling of the first teeth of the second dentition.

102 children were re-inspected, and of these 11 required additional fillings.

Percentages of Consents to Treatment by Fillings.

Victoria Road, 75 per cent.; Tay Street, 47 per cent.; St Andrew's (Boys), 73 per cent.; St Andrew's (Girls), 67 per cent.; Hawkhill, 38 per cent.; St Joseph's (Boys), 62 per cent.; St Joseph's (Girls), 34 per cent.; Glebelands, 53 per cent.; St Patrick's, 49 per cent.; Mains, 11 per cent.

Numerical Table of Treatment Done.

Fillings	1,182
Dressing and Applications	1,314
Scalings and Brushings	37
Extractions—	
Temporary Teeth	1,572
Permanent Teeth	227
Anaesthetics—Local	1,142
—General	137
Advice given	167

Sight-Saving School.

One morning session per week is reserved for the reception, treatment and re-inspection of cases, and again the regularity with which these patients attend for re-inspection every six months is to be commended.

Twenty-six received dental treatment or advice, five of these being new cases.

Treatment done :

Fillings	27
Extractions—	
Temporary Teeth	13
Permanent Teeth	8
Local Anaesthesia	16
Dressings and Applications	8
Scalings and Brushings	2
Advice	11
Abscess incised	1

Cases Referred by Eye Specialist.

There were seven, all Tuberculin Tested and Positive, and suffering from oral sepsis.

Twenty-six extractions of teeth were necessary for abscesses.

Cases Referred by Ear, Nose, and Throat Specialist.

These numbered sixteen, ten of which were oral sepsis and its necessary correction prior to removal of tonsils; two were otalgia referred from the teeth; four were dental abscesses.

Twenty-eight extractions and two fillings were necessary.

Cases Referred by Tuberculosis Medical Officer.

There were five, four being cases of oral sepsis, and one an obscure case.

Twenty-four extractions were done for abscesses, etc.

Fairmuir School.

Five cases were submitted for treatment :—

Oral Sepsis,	2
Abscess,	1
Earache from teeth,	1
Toothache,	1

Orthodontic Treatment for Irregularities of the Teeth.

These cases by arrangement with the Dean of the Dundee Dental Hospital may receive treatment at a small cost by means of regulating appliances.

Deaf and Dumb School.

Two cases of oral sepsis were treated.

Bacteriological Examinations.

In suspicious cases of oral sepsis smears from the mouth have been taken and examined in the Research Laboratory of the Dental Hospital. Several were positive for Vincent's Infection.

Observations.

The appalling negligence and condition of the teeth among children in the city are responsible for the predominance of treatment by extraction.

So many of the cases presented at the clinic and inspected at the schools show dental decay beyond the stage for satisfactory filling. The search for early dental decay, i.e., the minute cavity as carried out at the inspection in the schools is the correct policy. It is doubtful if two dental officers can accomplish the round of all the schools in one year.

Total Attendances at the Dental Clinic Numbered 3,920.

Number of Children attending,Boys, 1,464; Girls, 1,408.

Parents or Guardians accompanying them, 2,038.

Nurses Sutherland and Gibb discharge their duties commendably.

Thanks are due to Head Teachers for their assistance in facilitating the Routine Inspection.

We are indebted to the various Officers and Nurses of the Medical Staff for their kind co-operation.

ERNEST E. CASSADAY, M.B., Ch.B., L.D.S., D.P.H.

MARGARET G. L. RITCHIE, L.D.S.

OPHTHALMIC SPECIALIST'S REPORT.

1936-1937.

Sir,

The following is a detailed list of 1,760 attendances at the Eye Clinic during the session 1936-37. This shows an increase of 350 over the figures of the previous session.

Refractions	...	...	...	...	974
Corneal Ulcers	...	...	...	...	443
Conjunctivitis	...	...	...	...	45
Interstitial Keratitis	...	...	...	...	107
Blepharitis	...	...	...	...	32
Follicular Conjunctivitis	...	...	...	...	23
Corneal Abrasion	...	...	...	...	4
Chalazion	...	...	...	...	35
Congenital Cataract	...	...	...	...	10
Hordeolum	...	...	...	...	20
Nystagmus	...	...	...	...	3
Granulation of Conjunctiva	...	...	...	...	2
Tear Duct Obstruction	...	...	...	...	10
Lid Abscess	...	...	...	...	10
Corneal Nebulae	...	...	...	...	25
Wound of Lid	...	...	...	...	5
Foreign Body	...	...	...	...	2
Congenital Choroidal Degeneration	...	...	...	...	5
Admissions to Sight Saving School	...	...	...	...	3
Trachoma...	...	...	...	...	2
Total					1,760

Several children requiring urgent indoor attention were admitted to Maryfield Hospital, where treatment was carried out under my supervision. Two cases of trachoma were also transferred to Maryfield Hospital, arrangements having been made for the children to attend there for special daily treatment.

My thanks are due to Dr Hunter for his valuable aid and advice in treating specially selected cases of corneal ulcers of tuberculosis origin by inunction of tuberculin ointment. I am also indebted to the full-time Medical Staff and Clinic Nurses for their assistance during the past session.

I should like to take this opportunity of wishing Dr Kidd a long and happy retirement, and of thanking him for his many kindnesses, his help and co-operation in the past.

(Signed) ALLISTER M. MACGILLIVRAY,
M.D., D.O.M.S

EAR, NOSE, AND THROAT DEPARTMENT.

1936-1937.

New Cases seen	...	...	...	390
Diseases of the Ear —				
A.O.M.S.	....	...	...	8
C.O.M.S. ...	...	....	...	39
Furuncle ...	...	....	...	5
External Otitis	...	....	...	4
Mastoid ...	...	....	....	6
Inflation ...	...	...	...	20
Paracentesis	...	...	....	2
Wax ...	....	...	....	15
Foreign Body	...	...	...	1
Conservative Treatment	...	...	...	56
Diseases of Nose and Throat—				
Nasal Cattarrh	...	...	....	4
Rhinitis ....	....	...	....	6
Other Nasal Conditions	...	...	...	10
Tonsillitis	....	...	...	8
Operative Treatment—				
Tonsils and Adenoids	...	....	...	285
Mastoids ...	....	...	...	6
Septum ...	...	...	....	1
Polypus ....	...	...	...	1
Referred to Dentist	...	...	...	20
Referred to Sun-Ray	...	...	...	14
Old Patients examined	...	...	...	216
Negative examinations	....	...	...	41
Total number of cases examined	...	...	...	606
Average number of cases examined daily	...	...	...	15

(Signed) M. J. GIBSON,

M.B., F.R.C.S.E.

X-RAY SPECIALIST'S REPORT FOR 1936-37.

DURING the past year 83 children have made 452 attendances at this Department. The following table shows the diseases from which they suffered :—

Ringworm of the scalp :—

Microsporon (a)	1
Trichophyton (b)	2
Kerion (c)	6
Ringworm of the body (a)	3
Favus of the scalp	4
Alopecia areata	6
Streptococcal dermatitis	17
Eczema and dermatitis	10
Psoriasis	10
Other diseases of the skin	24
	—
	83
	=

(a) Includes 1 case from Angus.

(b) Includes 1 case from Perthshire.

(c) Includes 4 cases from Angus.

X-ray epilation continues to be carried out at my home pending the installation of new apparatus.

I have to thank Dr Kidd for the friendly co operation which has made my eleven years of work in the Clinic so pleasant and the rest of the staff, especially Nurse Miller, for the help they have given during the past session.

(Signed) JOHN KINNEAR,

M.D., M.R.C.P., Ed.

Holiday Homes.

During the past session 1,789 children were examined with a view of their having a fortnight in the country at one or other of the holiday homes which provide holidays for our city children.

The new arrangements of the Dundee School Holiday Camps have allowed of three groups of 30 going to Edzell, three groups of 30 to Saline, and three groups of 30 attending the Trek Camps in the Trossachs. These camps are held during the "seven weeks." Children are examined for Edzell and Saline to ascertain that they are clean and free from infectious disease. Those going to the Trek Camps have to be 13 plus, and are examined to see that they are physically fit to do the trek between the various camps.

Their footwear is also inspected, as unsuitable boots or shoes would render the wearer unfit for the walking.

The Trek Camp Circuit is a chain of three camps situated at Callender, Aberfoyle and Brig o' Turk. Commencing on Monday, Scholars travel by train to one of the base camps, stay there three days and then walk the 10 miles to the next camp, stay there three days and then move on to the next camp again, stay three days, and then complete the circuit which takes in all twelve days.

This is an excellent holiday for these children, and the groups which have finished their trek have been delighted with the outing and its new experience while at the same time improving their health and gaining knowledge of some of the beauty spots of their own country.

The thanks of all those children who have participated in the Trek Camps are due to the officials of the E.I.S., who have made this form of holiday possible. To the committee in charge of the Camps at Edzell and Saline their thanks are also due.

The opening of the new holiday home at Aberdour by the Catholic authorities has been the means of giving a holiday to some 300 children attending the various Catholic schools in the City.

This home fills a much-needed place in the holiday programme of the city, and it is with regret that we have to record the closing of Marfield Home at Rattray, Blairgowrie. Marfield Home has for many years taken throughout the year regular groups of children, and the kindly care which was ever bestowed upon the chil-

dren will long be remembered by those who were fortunate enough to have benefited from a stay in this Home.

The School Medical Staff on behalf of those 1,789 children wish to thank the E.I.S. officials, the committee in charge of the Holiday Camps, and all those interested ladies and gentlemen who are responsible for the carrying on of Auchterhouse Holiday Home (Dundee Invalid Aid Society), Comerton Home, Newport; St Leonard's Home, St Andrews; and the Armitstead Home, Barnhill, for the care and kindnesses extended to these city children while they were at holiday home or camp.

The Pearson Picnics, the Rotary Club Picnic, and the "Toc H" outing have again given pleasure to many children, and our thanks are due to the organisers of these outings which certainly benefit the children in no small degree.

Personally I wish to thank every member of the Staff, Doctors, Health Visitors, Clerkesses, Clinic Attendants, and Cleaners for their co-operation in the work of this department. Their cheerful assistance, their thoughtfulness and their tact make the work of the department easy, and it is this fine spirit that produces the smooth working of the School Medical Service.

Again we have had to call for extra work on account of illness on the part of several members of the staff, and this extra work has often entailed "after hours" work—work always accepted without a murmur and carried out in a careful and painstaking manner, thus again showing the fine spirit of the Staff with whom it has been my privilege to work and who I now leave with the greatest regret.

My thanks are also due to Mr Cameron, the Director of Education, to every member of his staff, to the various members of the Public Health Service and to all other Corporation officials for their personal kindness to me and for their willing co-operation in the work of the School Medical Service.

Lastly my thanks are due to Dr Burgess, the Medical Officer of Health, for his unfailing assistance, his courtesy and kindness to me in my work. It has been a pleasure to work for such a Chief whose tact and human interest in his work make for the closest co-operation between every department and the happy atmosphere which exists in the Public Health Service of the City of Dundee.

VETERINARY INSPECTION.

Report on Veterinary Inspection by Andrew Spreull, M.R.C.V.S., from 16th September to 31st December, 1936, including duties performed by Hugh Ferrier, M.R.C.V.S., from 1st January to 15th September, 1936.

(1) Conditions and Cleanliness of Cattle.

General conditions and cleanliness of cattle, moderate.

- (a) The nature of Fodder and Diet has been good throughout the year.
- (b) Number of Diseased Cows found totalled 25, 20 cases of Tuberculosis, 4 cases of Mastitis and 1 case of Enteritis.
- (c) Disposal of milk from diseased cows :—Destroyed in all cases.

(2) Inspection of Cattle.

	Average	Number of	Annual
	Number of Cows	Cows Inspected	Frequency of Inspection
(a) Registered Dairies, ...	497	2,649	Every Three Months.
(b) Exempted Premises, ...	5	5	Annually.

Quite a number of Dairies are below standard.

(3) Bovine Tuberculosis.

In the course of my routine Dairy Inspections I have found several Tubercular cows which have been recent additions to herds.

- (a) Total number of cows found Tuberculous on clinical examination, and slaughtered under the T.B. Order of 1925, 11
- (b) Total number of cows found Tuberculous after Tuberculin Test, and slaughtered under the T.B. Order of 1925, 9

- (c) Total number of cows to which the Tuberculin Test was applied under Section 22 of the Milk and Dairies (Scotland) Act, 1914 was 71. 57 passed the test and 14 reacted and were removed from the Herd.
- (d) Number of Dairies holding graded milk licences in respect of tubercle-free herds :—

Name and Address.	Average Number of Herd.	Estimated Number of Gallons Produced per Annum.
CERTIFIED. Messrs. Alex. Keay & Sons, 11 Forthill Road, Broughty Ferry.	24	16,060
CERTIFIED. Messrs J. G. Bisset & Sons, 12 Holly Road, Broughty Ferry.	5	5,475

- (e) There are no other dairies known to have tubercle-free herds.

(4) Miscellaneous.

- (a) No dairies hold licences for the production of Standard Milk.
- (b) There were no samples of milk taken for examination in terms of Section 21 of the Milk and Dairies (Scotland) Act, 1914.
Arrangements are almost complete for a comprehensive examination of milk samples.
- (c) The regulations under Sections 13 and 14 of the Milk and Dairies (Scotland) Act, 1914, are being duly complied with in this district.

Cattle Market.

During the year two bullocks and two cows, showing obvious signs of disease were seized in the Cattle Market. With the owners' consent these were all immediately slaughtered.

The Cattle Market was visited every market day, and all the animals exposed for sale were inspected for the purpose of pre-

venting animals being sold which showed obvious symptoms of disease and which were ultimately intended for human food.

All animals suspected of being diseased which are exposed for sale in the fat stock market, are seized under powers conferred by Section 43 of the Public Health (Scotland) Act, 1897, which renders the owners of animals so seized liable to prosecution. The carcasses undergo a minute inspection, and are dealt with according to the Meat Inspection Regulations.

Anthrax.

There has been no outbreak of this disease in the City during the year.

Foot and Mouth Disease.

There has been no outbreak of this disease during the year.

Swine Fever.

There has been no outbreak during the year, but two visits were made to pigs reported dead, suspected of suffering from Swine Fever. This was reported to the Ministry of Agriculture and Fisheries, and Form "A" was served on the owner with copies to Police and Local Authority.

Sheep Scab.

There has been no outbreak of this disease during the year, but one visit was made to Broughty Ferry at the request of the Ministry of Agriculture and Fisheries, tracing Sheep Scab in-contact sheep from Perth. These were found to have been moved into the County of Angus.

Parasitic Mange.

One horse was reported as suffering from Parasitic Mange. This was confirmed by me and reported to the Ministry of Agriculture and Fisheries. 31 in-contact horses were inspected and found to be healthy. The premises and in-contact horses were thoroughly washed and disinfected, and there was no further outbreak.

Importation of Animals Act, 1922.

Under this Order, 1,251 Irish and Canadian cattle were admitted into the City accompanied by licence, and these were all

inspected. This is an increase of 198 imported cattle as compared with 1935.

Of the above number 275 imported animals were re-licensed from the Cattle Market.

Transit of Animals Order, 1927, and Amendment Order of 1931.

Under this Order all railway trucks and road vehicles, whether mechanically propelled or horse-drawn, used for the conveyance of live stock to a market, must be washed, scrubbed, thoroughly cleansed, and thereafter disinfected before leaving the market and before any other animal, or any fodder or litter, or any other thing intended to be used for or about animals is placed in it, provided the Local Authorities have such washing facilities or have caused such facilities to be erected.

A record of all animals carried and the dates and places at which the vehicle was cleansed and disinfected must be kept available on the vehicle to which it relates by the owner.

One lorry driver failed to produce records of stock carried, and was prosecuted for contravening Section 4 (3) of the above Order and was fined 5/-.

During the year 2,463 vehicles and 123 crates, bringing in animals to the market, were washed, scrubbed and disinfected at the Cattle Market.

From periodical visits to the various railway stations it was observed that the Railway Authorities were adhering to this Order.

Foreign Hay and Straw Order.

Visits were made to vessels arriving at the harbour with cargoes of foreign hay, straw and esparto grass. These were all found in order.

Meat Inspection.

Compared with 1935 there has been an increase of 452 carcasses wholly or partially condemned for Tuberculosis. There is also an increase of over 1000 carcasses from the figures of four years ago.

The two main factors causing this increase are :—

- (1) More strict Meat Inspection Regulations.
- (2) Increased requirements especially in cows and bulls.

This entails a great amount of extra work on the part of the Meat Inspectors and Detention Officers. Since the appointment of the present two Detentions Officers the detaining duties performed by them have almost been doubled.

Farms.

From 16th September, 24 visits were made to Gourdie and Whitelawstone Farms in connection with examining, testing and treating the animals thereon.

- 1.—There was an outbreak of Parasitic Bronchitis in the calves at Gourdie. Unfortunately this was a virulent attack, resulting in a loss of seven animals.
- 2.—One horse died which was suffering from Inflammation of the Bowels and Degeneration of the Kidneys. Two Bulls and 20 Heifers successfully passed the prescribed Tuberculin Test and were admitted to the herd.

Corporation Horses.

Cleansing Department.—Eight horses were examined and treated for minor ailments. There has been no serious illness.

Works Department.—One horse was examined and treated successfully.

Ashludie Sanatorium.

Two visits attending one pig which died from inflammation of the abdominal organs.

East House.

The animals did not require any veterinary attendance.

Caird Park.

The animals did not require any veterinary attendance.

A. SPREULL, M.R.C.V.S.
Veterinary Inspector.

SANITARY DEPARTMENT.

Report by Mr ALEX. A. RUSSELL, Chief Sanitary Inspector.

SANITARY DEPARTMENT,
WEST BELL STREET,
DUNDEE, 1st July, 1937.

To the Honourable—

The Department of Health for Scotland; and
the Lord Provost, Magistrates, and Councillors—
the Local Authority of the City of Dundee.

GENTLEMEN,

I have the honour to submit my Annual Report showing the work of the Sanitary Department during the year 1936. The Report has been prepared in accordance with the circular of the Department of Health for Scotland dated 29th December, 1936.

Foreword.

The ramifications of a modern Sanitary Department—extended and amplified each successive year, by new or amending Acts, Orders and Regulations, etc.—apparently have no bounds; while the duties such enactments impose are invariably diverse and numerous.

The year under review has not failed to bring added responsibilities. The transference to the Department of the administration of the Pharmacy and Poisons Act and the Feeding Stuffs and Fertilisers Act with their attendant Regulations; the requirements of the Milk (Special Designations) Order (Scotland), 1936, and sanitary clauses of the Dundee Corporation Order, 1935, have each brought their own demands on the time and labour of the whole staff.

While we welcome the new powers entrusted to us, and recognise in full measure the worth of the penalty clauses strictly applied; we perhaps appreciate and value more fully their influence reasonably administered, as a means given in the interests of Public Health to assist us in eradicating the gross evils inherited from the past; and to prevent, or at least control, the newer health problems associated with our modern civilisation—oftentimes created unwittingly by man's ingenuity.

Until quite recently, the Sanitary Inspector was generally viewed with suspicion and distrust as an emissary of the law, whose main object was to hale offenders before the court; happily, these days are past, and with few exceptions he is recognised as a person whose work and aim are for the betterment of humanity—hygienically, socially and morally.

During the year, in addition to the daily routine work and the extra duties imposed, a special survey of all shops, wholesale and retail, and warehouses within the city was made in terms of the recent Shops Act—the result of which is included later in the Report. Further, the staff have responded wholeheartedly to the demands made by the Town Council for an increased representation of houses and areas considered insanitary and unfit, for the purpose of having them rapidly dealt with in terms of the Housing Acts; and in this respect a new record of achievement has been created. For these services, given ungrudgingly and often beyond the ordinary working hours, I express my appreciation.

I also record with much gratification that the bond of harmony and spirit of co-operation which exists between this and all other Corporation Departments is being well maintained. Particularly do I acknowledge the generous assistance rendered by the Departments of the Chief Constable, City Engineer, and Superintendent of Cleansing in the detection and reporting of nuisances discovered, so that measures for their abatement can be speedily undertaken.

Death-Rate: Density of Population, and Acreage.

The death-rate per 1,000, as corrected, for 1936 was 14.1, as against 13.2 in 1935, and 13.6 in 1934.

The population, as estimated to the middle of 1936 by the Registrar-General, was 178,692.

The acreage of the City, excluding foreshore, is 7,316. This works out at 24.42 persons to an acre.

Rainfall.

The total rainfall in Dundee, as noted at the Eastern Necropolis and reported by the Superintendent of Cemeteries, was 27.61 inches as against 28.96 inches last year. The figures for each month are as follows:—

January	...	...	...	...	4.19 inches.
February	...	...	...	...	3.58 inches.
March	...	...	...	...	2.26 inches.
April	...	...	...	...	0.53 inches.
May	...	...	...	...	1.31 inches.
June	...	...	...	...	1.52 inches.
July	...	...	...	...	3.93 inches.
August	...	...	...	...	1.93 inches.
September	...	...	...	...	3.25 inches.
October	...	...	...	...	1.41 inches.
November	...	...	...	...	1.57 inches.
December	...	...	...	...	2.13 inches.

Total ... 27.61 inches.

This shows an average fall of 2.30 inches per month, as against 2.41 inches of the former year, and 2.48 in 1934.

Water Supply.

The Corporation are responsible for the Supply of Water to the City. The Department particularly concerned therewith is under the charge of Mr George Baxter, O.B.E., M.Inst.C.E., who reports as follows :-

Sources and System of Supply.

The Water Supply of the City of Dundee and of the area supplied from the Dundee Corporation Water Undertaking outwith the City is wholly by gravitation. The principal source of supply is Lintrathen Loch, situated approximately 18 miles north-west of the city at an elevation of 680 feet above sea level. The other supplies of the Undertaking are derived from the Works of the old Dundee Water Company at Monikie and Crombie, situated approximately 8 miles and 10 miles north-east of the city at elevations of 476 feet and 522 feet above sea level respectively.

The relative importance of the foregoing works from a water supply point of view is apparent from the following particulars of their reservoir capacities and catchment areas.

	Capacity. Gallons.	Surface Area at Top Water Level.	Extent of Catchment Area.
Lintrathen Loch	2,141,429,000	440 acres	18,500 acres
Monikie and Crombie (4 Reservoirs)	654,763,000	181½ "	3,500 "

Under normal conditions 90% of the daily supply of the city and district is drawn from Lintrathen, 8% from Monikie, and 2% from Crombie for the supply of the Burgh of Carnoustie.

Beyond prolonged storage and straining through fine mesh screens, the Lintrathen water receives no other form of treatment before delivery for consumption. Both the Monikie and Crombie waters are, however, filtered through slow sand filter beds, the Monikie water at Gagie and the Crombie water at Mains of Panmure.

Area and Population Supplied.

The statutory area of supply of the Undertaking, excluding the areas supplied from the aqueducts and conduits between the

various storage reservoirs and the city, extends to $54\frac{1}{4}$ square miles, of which $15\frac{1}{2}$ square miles are situated in the compulsory area, and $38\frac{3}{4}$ square miles in the permissive area of supply.

Outside of the City of Dundee the principal burghs and villages supplied are:—On the north side of the Tay Estuary, the burghs of Carnoustie and Monifieth, and the villages of Barry, Muirhead, Birkhill, Invergowrie, Longforan and Meigle; and, on the south side of the Estuary, the burghs of Newport (including Wormit) and Tayport.

The area varies in altitude from sea level to an elevation of 457 o.d., which is the highest point supplied, while the average population supplied is approximately 204,000.

The number of houses supplied within the statutory limits of supply as at 15th May, 1936, was 54,230, water closets 46,057, baths 16,203, and the number of meters fixed for trade supplies 1,408.

The Corporation have recently offered to provide supplies for rural areas in the Counties of Angus and Perth, including the Carse of Gowrie as far as Glencarse and for the villages of Newbigging and Wellbank on advantageous terms to these areas.

Consumption.

The average daily consumption of water for all purposes for the year ending 15th May, 1936, was 10,798,650 gallons. This represents a consumption per head of the population supplied of 52.93 gallons, of which 37.87 is for domestic and non-metered supplies and 15.06 for trade and general industrial purposes supplied through meter. The minimum daily consumption for the same period was 8,029,400 gallons and the maximum 13,201,000 gallons.

With the housing additions which continue to be made both in the city and in the burghs supplied from the Corporation Works, and with the facilities which are being provided in the new houses for the use of water, the demand for domestic purposes is constantly on the increase. The rate of increase is, however, less than might have been expected, and the Department has still an ample margin of supply over possible maximum demand during the driest year that is likely to occur.

Chemical Analyses of Waters.

The following are typical Chemical Analyses of the Lintrathen, Monikie and Crombie Waters :—

	Lintrathen	Monikie	Crombie
	One Million Parts Yield.		
Free Ammonia, .....	.002	.004	.002
Albuminoid Ammonia, .....	.074	.094	.072
Carbonate of Lime, etc.	30.00	60.00	50.00
Chlorine,	8.00	15.00	12.00
Nitrogen, as Nitrates,	None	.10	.54
Nitrites,	None	None	None
Dissolved Oxygen,	10.85	8.57	10.36
Permanent Hardness (Clarke's Degrees)	1 $\frac{3}{4}$	3.99	3.71
Temporary Hardness,	Nil	0.21	0.21
Total Hardness,	1 $\frac{3}{4}$	4.20	3.92
Lead, or other Poisonous Metals,	None	None	None
P.h. Value,	6.8	7.5	7.2

All three waters have a little colour, i.e., Monikie and Crombie (Yellow .8, Blue .2), Lintrathen (Yellow 1.2, Blue .2), Lovibond's Standard Scale. The presumptive test for B.Coli is seldom positive in the case of all three of the raw waters in less than 50 c.c.'s.

New Works.

With the development for housing purposes of ground hitherto used for purely agricultural purposes and remotely situated from the present centres of distribution, the Department recently found it necessary to recommend the construction of two new service reservoirs—one of 750,000 gallons capacity at Balmossie north of Barnhill and the other of 1,000,000 gallons capacity at Gowriehill, north-east of Invergowrie. The purposes of these reservoirs is primarily to maintain adequate pressures at the present extremes of the Distribution System which are becoming overloaded.

The construction of the Balmossie Reservoir is now in hand, and the intention is to proceed with the Reservoir at Gowriehill during 1938.

Domestic Water Supplies—Sinks, Etc.

An important change in the law, of interest to property owners, has been effected by virtue of the Dundee Corporation Order, 1935, which transfers to the Corporation so much of any service pipe—known as the “communication pipe”—as extends from the service main of the Corporation to the point of junction with the stopcock, or where a stopcock is not fitted to a point two feet from the boundary of the street or from the point at which such

pipe enters the premises, whichever is nearer to the service main; and the rights and obligations of the Corporation with reference to the maintenance, repair, renewal and removal of pipes laid down by them shall extend and apply to all such communication pipes.

The following Table shows there are 854 houses within the city lacking an internal supply of water—52 less than last year. Many are in properties scheduled to be dealt with in terms of the Housing Acts, and it is hoped by another year to effect a considerable reduction.

Ward.	No. of Houses	ROOMS					WATER SUPPLY.	
		1	2	3	4 & over		On Stairs, Landings, &c.	In Courts, Areas, &c.
1.	96	86	10	—	—		96	—
2.	108	70	31	5	2		95	13
3.	115	98	14	2	1		93	22
4.	80	61	15	3	1		77	3
5.	27	18	6	2	1		14	13
6.	196	167	25	4	—		182	14
7.	24	3	14	4	3		3	21
8.	65	51	14	—	—		62	3
9.	75	56	19	—	—		72	3
10.	14	2	4	8	—		2	12
11.	7	2	—	5	—		—	7
12.	47	34	9	3	1		41	6
Totals	854	648	161	36	9		737	117

19 houses and 6 other premises were each provided with a sink and internal supply of water direct from the public main; 49 houses had their supply improved by means of larger service piping, and in three instances old iron sinks were replaced with modern enamelled earthenware fittings.

Drainage.

The choked drain or trap spueing filthy and offensive sewage over the public footway or back court, although not now feared as the disseminator of disease as it once was, is undoubtedly a serious nuisance, and requires immediate attention.

Not all chokages are due to defective drainage. Remarkable as it may seem, the greater number by far, occur in congested areas where no playing ground—other than the public street or back court—is available for children. In spite of covers being sealed with cement, children are frequently found satisfying their curiosity by filling drain traps with all sorts of rubbish.

It is also interesting to note that the drains for those properties erected for the persons rehoused from insanitary houses, have not to the same degree been the subject of this form of mischief. The detection and removal of this kind of nuisance is a routine task and takes up a considerable portion of the inspectors' time; it is therefore anticipated that the opening out of all congested areas and the provision of ample and suitable playing grounds will result in a proportionate reduction in the number of such nuisances.

Public Sewerage.

The construction and maintenance of the sewers within the City are under the charge of Mr David B. McLay, B.Sc., M.Inst.C.E., who reports as follows:—

New Sewers Laid.

During the year from 16th May, 1935, to 15th May, 1936, approximately 2.64 miles of new sewers were laid, making the total length of sewers 156.79 miles; and the sum of £3,860 was expended on the work of maintenance and repair.

Flooding.

Several severe rainstorms occurred in 1936, causing flooding in various districts. On 19th July, a number of houses were flooded in Perth Road area and in Windsor Street, brought about by soil being carried down from ground at a high level on the north side of Perth Road silting up the street gullies; the storm water which overflowed on the south side of Perth Road passed down steep sloping gardens doing much damage to walks and flower beds. In other cases the flooding was caused by sewer regurgitation into basements.

Again, there was serious flooding in Foundry Lane, a low-lying part of the city. It is pleasing to report, however, that the Corporation are to close and demolish the properties in this area most liable to suffer from flooding.

Horsewater Wynd, another low-lying area, was also flooded, but as the dwelling-houses thereat are embodied within a Clearance Area it is hoped before long the tenants will be rehoused and the properties demolished.

Proposed New Intercepting Outfall Sewer.

For some years it has been known that the sewer in Dens

Road which drains an area containing many of the Corporation's New Housing Schemes is not capable of taking the quantity of sewage and rainwater draining into it. To overcome this difficulty it has been agreed to construct a new sewer in Dens Road from Provost Road to Victoria Bridge. Unfortunately, the Intercepting Sewer into which this new sewer would fall is already overcharged, and it was decided to plan a new Interceptor from Victoria Bridge by way of Victoria Street, Arbroath Road, Lilybank Road, and Broughty Ferry Road to the river front. The Harbour Trustees objected to the discharge of such a sewer at the wharves, so the line had to be amended and is now shown as continuing to Stannergate Point, more commonly known as "Tuppy John's Corner."

To reduce expense it is proposed to make a storm water overflow from the sewer at Taybank to the river front, and to continue the sewer in a reduced size, yet capable of taking six times dry weather flow of sewage to the outfall. The diameter of the Interceptor is to be 9 ft. 6 in., but is later reduced to 4 ft. 0 in. below the overflow. The Intercepting Outfall Sewer will also be extended from Victoria Bridge westward to the foot of Hilltown, and will intercept all the sewers that discharge from the area north of Victoria Road and east of Hilltown, thus relieving the sewers in the lower area of the city and preventing flooding there. Ultimately it will be carried further west to Lochee Road at Polepark, where it will take in Lochee Road Sewer.

Effect of New Housing.

The continued expansion of the developed area of the city is throwing an increasing burden on the sewerage system, and as the open areas are gradually encroached and built upon it will be necessary for the enlargement or duplication of certain sewers. The construction of Beechwood Housing Scheme will tax the capacity of Lochee Outfall Sewer; and as this sewer runs west and round the shoulder of Balgay Hill, thence back into the city joining the Perth Road sewer at Arnhall, it can be seen that the duplicating of this sewer will be a work of considerable magnitude. The development of the Housing Estates of Linlathen and Magdalen's Kirkton also reveal the necessity for a new sewer. At present, the drainage from considerable portions of these estates can only be dealt with by pumping, and probably it will be more economical to construct a gravitation sewer down the Dighty Valley rather than instal two pumping stations.

St Mary's Road Ditch.

Complaints were received about the condition of the ditch that runs along the north side of St Mary's Road. A certain amount of sewage from St Mary's Farm finds its way into this ditch, and representations were made to the County Authority, in whose area the farm is situated, but these produced no abatement of the nuisance. The Works Committee, therefore, decided to pipe the ditch so far as it lies in the city, and this has now been done; the cost of which is recoverable from the future feuars of the adjoining ground.

Sewage Purification and Disposal.

Dundee is fortunately situated. Its sewage is discharged into the tidal waters of the Firth of Tay, thus the need for providing costly purification plant, as required by many inland towns, is obviated. While this is so, we cannot assume that the pouring of millions of gallons of crude sewage from sewers which extend for only a short distance into the Firth, is satisfactory and free from nuisance. At various times complaints have been received regarding offensive smells at the wharves and of excreta being deposited on the beach at different points. In January this year the Harbour Trustees complained of nuisance arising from the sewer at Shed V. Eastern Wharf. This is the point of outfall of one of our main sewers. Unfortunately, the Harbour Authorities had extended a jetty in front of the outfall and thus confined to a certain degree the free flow of the discharge. As the cause of complaint was considered, at least to some extent, to be occasioned by the aforesaid jetty, the matter was remitted to a Sub-Committee to meet the Harbour Trustees to go into the question of the application of remedial measures.

Rivers Pollution.

This subject has been written of under the preceding heading.

Scavenging and Refuse Disposal.

The Department which deals with this important branch of the Public Health Services is under the control of Mr W. H. Sagar, Superintendent of Cleansing. During his regime, there has been a continuous and general improvement in the methods of refuse collection and disposal. A great achievement has been the abolition of the open insanitary ashpit and the old method of depositing heaps of unsightly and offensive refuse on the city streets every morning. The introduction of the galvanised iron dustbin has made it possible for the refuse to be emptied direct into the carts

and motor waggons; and whereas it used to be sodden to a very filthy degree, the larger proportion by far is now in a very dry state, thus minimising the work at the Refuse Disposal Plant, rendering separation easy and incineration more rapid.

An excellent system of Ashbin Maintenance Service has now been in operation for the past few years. This method is working very satisfactorily, and has been much appreciated, particularly by owners of tenement property. The initial cost of the bin is borne by the property owner, and thereafter for an annual payment of two shillings it is maintained by the Department.

For the removal of Trade Refuse, for which there is a fixed rate of charges, a voucher system has been introduced for the benefit of small traders. A book of ten vouchers can be purchased for 1s 8d, and for each dustbinful or its equivalent of shop refuse removed, one voucher is handed to the dustman. At the Disposal Plant, a heterogeneous variety of material is recovered and sold with profit to the Department. The quantities disposed of during the past four years are as follows :—

28,200	tons of	Manure;
8,800	„ „	half-burnt Fuel;
965	„ „	Scrap Metal;
3,744	„ „	Tins;
840	„ „	Paper;
433	„ „	Broken Glass;
91	„ „	Bones and Rags; and
70,161	dozen	Bottles.

These figures tell that waste is only matter in the wrong place, and that one man's waste is another man's raw material.

The old method of cleaning street gullies by hand with a scoop and placing the filthy material on the roadway has now been eliminated with the introduction of a Mechanical Gully Cleaner, which sucks out the contents by vacuum into a sealed container and thereafter re-seals the gully with clean water.

Ashpits and Ash or Dust Bins.

It is very gratifying to report that the abolition of all the ash-pits within the City is practically now an accomplished fact. With the exception of two at properties presently under Closing Orders and a few on the outskirts, the old open and offensive ashpits have

entirely disappeared and modern dustbins substituted therefor. During the year, 1,034 worn-out bins were replaced by new receptacles and 174 new bins were laid down at recently erected houses, in place of ashpits abolished, or where no such accommodation had previously existed.

SANITARY CONVENIENCES.

Water Closets.

It is the policy of this Department to continue to press for one Water Closet within each dwelling-house, but certain difficulties present themselves, chief of which is lack of suitable accommodation, and particularly is this the case with one-roomed houses which total approximately 5,760.

Where practicable, however, the work of installing these conveniences is being pursued, and with a fair measure of success. During the year, 285 water closets—a figure similar to last year's—were provided as follows:—178 within houses, 21 within shops, 22 within premises such as offices, work places, etc., 30 in suitable positions outside where it was found impracticable to provide them inside, and 34 were renewals in place of obsolete or defective fittings.

As required by the Department of Health for Scotland, the following Table is submitted showing the number of water closets used in common by 2, 3, 4, 5 or 6 or more tenants respectively:—

Wards	W.C.s Each Serving Tenancies					
	2 Tenants.	3 Tenants.	4 Tenants.	5 Tenants.	6 Tenants or Over.	Total Tenancies.
1.	455	230	127	16	9	2,244
2.	316	105	85	28	20	1,558
3.	532	237	214	46	19	2,975
4.	334	257	167	16	26	2,356
5.	208	76	78	2	6	1,004
6.	403	242	228	35	47	2,928
7.	125	32	57	2	—	584
8.	575	323	172	50	34	3,304
9.	579	283	185	45	27	3,153
10.	83	31	20	11	3	412
11.	95	41	23	5	1	435
12.	838	344	315	51	30	4,411
	4,543	2,201	1,671	307	222	25,364

The year's figures, 25,364, compared with last years, 25,805, shows a reduction of 441 partly due to improvements effected during the year and partly to houses in old properties being closed under the Housing Acts.

Earth Closets, Privies, and Privy Middens.

AS AT 31ST DECEMBER, 1936.

SITUATION.	NUMBER OF		TO SERVE.		
	Privies or Earth Closets.	Privy Middens	No. of Households.	Persons.	
				M.	F.
Dighty Toll House - - - -	1	...	1	2	2
Old Manse, Mains, - - - -	1	...	1	3	3
Castle Mains (South House) - - -	1	...	1	...	3
Manse Lodge (Old Glamis Road) - -	1	...	1	...	2
Trottick - - - -	14	...	20	32	41
Harestane Rd. (W. March Cottar House)	1	...	1	2	1
Harestane Road (Bleachfield) - -	1	...	1	1	1
East Pitempton - - - -	1	...	1	1	1
Pitempton Railway Cottages - - -	2	...	2	2	1
517 Strathmartine Road - - - -	1	...	2	1	2
Station Cottage, Cox Street - - -	1	...	1	3	1
West Kirkton Cottages, Kirkton Road -	5	...	5	6	7
Gelly Cottages - - - -	2	...	1	2	2
East Lodge—McAlpine Road - - -	1	..	1	1	4
Main Lodge—Coupar-Angus Rd, - -	1	...	1	1	3
Backhill of Balgay - - - -	1	...	3	4	9
King's Cross Cottar Houses - - -	1	...	1	...	2
Hillside Farm - - - -	1	...	1	1	1
Balgay—Mains - - - -	1	...	1	1	1
Bingham Terrace (Gallowhill) - - -	1	...	1	1	2
220-222 Arbroath Road - - - -	...	2	2	2	8
399 Arbroath Road (Craigie North Lodge)	1	...	1	1	2
Gotterstone Cottar Houses (North) -	...	5	5	13	8
do. do. do. (South) - - - -	2	...	2	4	7
Barnhill Farm (Grieve's House) - -	1	...	1	1	2
434 King Street, Broughty Ferry - -	1	...	1	...	1
Arbroath Road (Linlathen W. Lodge) -	1	...	1	1	1

One house formerly served by a privy has had a modern wash-down water closet installed within the dwelling, and the privy demolished. The trend to substitute modern sanitary fittings in place of these survivals of an early age continues slow but sure. The main difficulty is want of drainage facilities, but as expansion towards the outlying parts of the city progresses it is only a question of time until we see all privies swept away.

Baths and Wash-Hand Basins.

At privately owned property 16 baths and 53 wash-hand basins with hot water systems have been installed. Last year the Corporation agreed to provide wash-hand basins in some 516 dwellings in certain housing schemes which were without such fittings. The position at the moment is as follows:—

At Logie the work has been completed.

At Hospital Park, 83 Houses have been completed.

At Dudhope the work has just commenced.

Washing-Houses.

While the common washing-house is not considered a satisfactory arrangement from the hygienic point of view; owing to the construction of a large number of the older tenemental properties it is the only type that can be made available for the purpose, and so long as they continue it is necessary to maintain them in good working order. During the year 56 enamelled earthenware wash-tubs were provided in place of the insanitary wooden tubs, 1 defective cast-iron boiler was replaced by a new boiler, 2 gas boilers were installed in place of the old cast-iron boilers. At one property a new washing-house was erected where formerly there was no suitable accommodation.

Drainage and Structural Work.

Throughout the year additions and improvements have been effected at many properties, and in connection therewith the following materials were used:—

- 285 water closets;
- 28 sinks;
- 16 baths;
- 53 wash-hand basins;
- 56 wash-tubs;
- 124 lead traps;
- 1 new washing house;
- 1 four-stalled urinal;
- 1 two-stalled urinal;
- 2 dormer windows;
- 13 rooflights;
- 13 roof ventilators;
- 1 cast-iron wash boiler;
- 2 gas wash boilers;
- 3,490 feet of soil pipe;
- 1,866 feet of flush pipe;

5,841 feet of water pipe;
 1,301 feet of waste pipe;
 4,666 feet of vent pipe;
 428 feet of cast-iron drain;
 7 cast-iron traps;
 164 yards of fireclay drain pipe;
 30 drain traps;
 4 inspection chambers.

Plans Submitted to the Works Committee.

The pre-viewing of plans before submission to the Works Committee still continues. This precaution is taken to ensure that all buildings and extensions are in keeping with local regulations regarding sanitation, and safeguards existing property against air and light restriction.

Schools.

There is in Dundee a considerable number of old schools on which the Education Committee have refrained from spending large sums for alteration or reconstruction in view of the fact that the movement of the population to new housing areas on the outskirts of the city has made the future of such schools uncertain; nevertheless, every endeavour is made to keep these schools as hygienic as their construction will permit, and in this respect much progress has been made since the work of the Education Authority was taken over by the Town Council in 1930.

At the moment new latrines are being installed at one of the largest Roman Catholic Schools, namely, St Mary's, Forebank, and proposals are under consideration for a similar replacement at Ann Street School. The old Middle School at Wallacetown erected as a temporary structure over 20 years ago, ceased to be wind and weather proof, and in the interests of health and safety the children were transferred to other schools.

Between 1st January, 1930, and 31st December, 1936, seven new schools were opened in the city, viz.:—Rockwell Primary School, Rockwell Central, St Martin's Episcopal, St Joseph's Boys', St Joseph's Girls' and Infants, Ss. Peter and Paul, and New Harris Academy. These schools were all equipped with modern furnishings, and the arrangements for heating, ventilation and sanitation are on the most approved lines.

Only slightly older than the schools above-mentioned are Logie Central School and St Mary's (Lochee) Boys' School, these are

well equipped in every respect. Of the schools of a still earlier time, perhaps the most modern in their furnishings are Ancrum Road, Broughty Ferry Eastern, Dens Road, Glebelands and Hawkhill. After some of these had been erected it was found that the system of heating and ventilation installed was unsatisfactory. The installation in Dens Road School was replaced with a new modern hot water system, and it is intended to take the same step with regard to Ancrum Road School, Broughty Ferry Eastern School and Stobswell Central School.

At present there is under construction a new school for Roman Catholic children at Lochee, which will take the place of the old building in St Mary's Lane, now demolished. Plans are also in hand for a new school in Graham Street and another opposite Clepington School, both of which will be necessary to meet the demand for increased accommodation required by the raising of the school leaving age to 15 in September, 1939. The Committee will also be called upon to erect new schools for the convenience of the children in the new housing areas, plans are already in hand for two Primary Schools in the Mid Craigie district. Similar provision for Magdalen's Kirkton, Beechwood and other housing schemes will follow in due course. In their arrangements for new schools it is the intention of the Education Committee to apply the results of modern scientific experience in respect of school hygiene and, in particular, to make as full provision as circumstances will permit for ample playground space and facilities for organised games and athletics.

Complaints.

Complaints numbering 4,327 received throughout the year by the Department, either written or verbally, again show a fall in number, being roughly 100 less than in 1935. This steady diminution may be ascribed to so many tenants previously living in old properties, the source of regular complaints, having been transferred to modern homes regarding which they have only compliments, and not complaints, to register.

This year groundless complaints numbered 214 as against 414 in the previous twelve months—truly a great saving as the Inspectors have their hands sufficiently full with genuine grievances without having to waste their time on unfounded allegations. The past year has seen an increase in the number of persons appealing to the Department for assistance in obtaining better housing accommodation. Notwithstanding the fact that many of those

who call are meantime residing in a house to which a Closing Order has been applied and will naturally be rehoused when suitable accommodation becomes available, they invoke our aid towards a more speedy solution to their housing problem. This is a matter over which we have little or no control, as the letting of Corporation houses is entirely within the province of the Department of the City Factor.

Statutory Intimations or Notices.

In the execution of the requirements of the Public Health (Scotland) Act, Burgh Police (Scotland) Acts, Local Acts and other Legislation, 9,648 notices or intimations, written or oral, including two notices served in terms of Section 20 of the Public Health (Scotland) Act, 1897, were transmitted to property owners or agents or authors of nuisances, all of which have received or are in course of receiving attention.

General Nuisances.

Routine visits for the detection of nuisances numbered 60,246, and as an outcome 7,730 nuisances were discovered, all of which were dealt with immediately.

Nuisances vary greatly in character, but some are more outstanding than others, and mention of a few might be made.

Dirty Houses.—Two were dealt with during the year. These were far beyond what we ordinarily term "dirty." One, tenanted by an aged widow, who upon the demise of her mate, seemed to withdraw from all intercourse with her fellow creatures, was particularly bad. The kitchen was fairly clean, but the room was nothing more or less than an ashpit — an indication of the state of affairs will be gathered when it is stated the refuse littered the apartment to a height of three feet and covered a bed. The tenant took heed of our warning, hired carts — two being required—to remove the bed, bedding and refuse. The removal of so much objectionable material ought to prove beneficial to her health, and as she now takes an interest in her home we feel our action has been doubly fruitful.

At the other house an inspection revealed one of the rooms to have among other rubbish a collection of 300 pint milk bottles—the explanation given for their presence was, a sub-tenant had found other accommodation and left them behind. With the removal of the bottles, a quantity that the owners were glad to recover, the cleaning up of the house was greatly simplified.

The nuisance at Riverside Drive written of last year was again the cause of complaints. Observations taken three times weekly over a period of three months made it possible to note the conditions prevailing at all states of the tide and wind. A consultation of officials concerned was held at the locus, when it was agreed that while a smell was perceptible within a near distance of the dump it could not be classified as a nuisance. It was their opinion that the impounding of water in that portion of the coup which is presently left uncovered at low tide would improve conditions.

A complaint was received regarding a tenant storing refuse in his cellar and also within the common washing-house. Notwithstanding repeated warnings the nuisance persisted, and court proceedings resulted with a fine of 10/- imposed on the offender.

From a jute mill intimation was received that an offensive smell was pervading their premises to the detriment of the health of the employees. Inspections aroused suspicion that the smell was coming from the public sewer via a fault in the private drainage, and further examination revealed an old drain below the flooring. This was properly sealed and the flooring renewed in concrete, since when no further complaint has arisen.

Verminous Houses and Persons.

Verminous Houses.—Rarely a day passes without our help being asked to rid houses of bugs. Throughout 1936 we treated some 284 rooms in 179 houses for these pests, employing both insecticide spray and sulphur candles. Included in the foregoing figures are 25 new Corporation dwellings, wherein 33 rooms were either sprayed or fumigated.

Bugs are a constant enemy and the dread of all who are afflicted with them. They have been a menace throughout the ages, and each succeeding generation has set itself the task of extermination. Complete extermination is, admittedly, no easy undertaking, but one which is not altogether an impossibility.

Take a block of houses wherein infestation is manifest. If all the tenants would declare their willingness for defestation the job could be tackled as a whole, and with the factor co-operating by sending men to remove skirtings, facings, etc., we would be tolerably certain of success, provided furniture also was treated. We

are, however, often faced with one tenant who is reluctant to make the requisite preparations, and though all other houses in the block were freed from bugs, the remaining infested dwelling would, before long, be a source of re-contamination.

In one instance when defestation measures were in progress in a new corporation dwelling, the bugs were so numerous that when the skirting boards were being removed it was necessary to resort to the use of a blow-lamp to prevent the property being over-run.

Verminous Persons.—During the year three cases coming under this category were dealt with. In each case it was an old man who had reached the stage of being no longer able to do his own turn. In one instance neighbours were compelled to complain regarding his condition, and the others were discovered by our own staff in the course of duty. The Medical Officer of Health's Department certified two as being incapable of looking after themselves. They were removed to hospital and their dwellings thoroughly cleansed. The third was removed to hospital by Magistrate's order.

These old people without friends or relatives to assist them are a problem, and to see them settled in a haven of refuge is a great relief to responsible officials.

Whitewashing and Painting Common Stairs and Passages.

With the advent of the Dundee Corporation Order, 1935, the powers regarding requests for painting, etc., of the above have been expanded to include water closets and wash-houses used in common. This extension is greatly welcomed, and will obviate the necessity of dealing separately with these conveniences, as has had to be the procedure in the past.

Early in June, 190 Letter Intimations concerning 1,150 stairs and passages at tenemental properties were dispatched to House Owners and Agents calling for work of the above nature to be undertaken. In general, the necessary work was carried out without untoward delay. It became necessary, however, to speed up certain procrastinators, and to this end 50 Statutory Notices were issued.

For distemping, etc., interiors of houses, brushes were loaned on 2,480 occasions for the cleansing of approximately 7,040 rooms.

Back Courts, Areas, Footways, Etc.

During the year the Corporation commenced the work of paving the footpaths within their housing schemes. These paths were formerly cinder tracks and their surfacing with impervious material is an improvement which is greatly appreciated by the occupiers of the houses and at the same time enhances the appearance of the schemes in general.

It is hoped the example will prove better than precept, and that house owners and those responsible for the upkeep of property will similarly take action at properties where such an improvement would be a decided acquisition.

As stated above, paving enhances appearances, but its benefits do not stop short there—the greatest boon bestowed by paving is its assistance towards cleanliness.

Unfortunately some people still regard rear areas as ashpits, and, despite efforts to stop the practice, continue to throw refuse into them. It is in such instances that the advantage of paved areas is most palpable. They can be cleaned thoroughly and speedily, whereas an unpaved surface defies proper cleansing and the ground soon becomes unwholesome and unsightly.

Approximately 18,000 sq. feet of paving or other suitable material provided with drainage facilities were laid down at back courts, etc.

Smoke Nuisance.

A picture postcard reminiscent of old days depicts Dundee from the Fife side of the river as being dominated by a legion of stacks belching forth smoke. This conception must not be taken literally; Dundee does possess a valiant array of mill chimneys, but they are not in a perpetual state of eruption. Since the publication of the facetious picture many are the aids that have been invented to minimise smoke emission, and much has been accomplished by instructing firemen in the art of firing—all converging towards making a “ Bonnie ” and not a “ Smoky ” Dundee.

In 1936, several changes have taken place in the bigger mills. One mill—ranking among the largest in the city—went over entirely to electric power. They are to generate their own current, and for this purpose have retained two boilers. This conversion,

owing to the size of the mill involved and the number of boilers necessary for the former method of working, means much towards the lessening of smoke emission.

One particular chimney, an old offender, now rears its head free from the imprecations of sundry sufferers. This happy state was brought about by the fitting of a new furnace. At another mill the boiler power was increased by a third—surely a sign of reviving trade. Also installed were two economisers.

The emission of smoke from a chimney of short stature was the cause of frequent complaints being received. The heightening of this chimney has done much to mitigate the nuisance. One complaint of alleged smoke nuisance occupied a lot of our time. In this instance it was the chimney in connection with a quarry on the outskirts of the town and where formerly the chimney was heightened at the instigation of the Department. Prolonged observations—occupying in all $15\frac{1}{2}$ hours—were made, and finally—but by no means peremptorily—it was decided that the allegations were without foundation.

Over the year 48 observations were taken, and in connection therewith 10 warning letters were dispatched.

Rats and Mice (Destruction) Act, 1919.

All employed in Public Health matters are well aware of the dangers consequent upon rat infestation. Occasionally isolated cases of children being bitten by these loathsome pests are reported in the press. The publication of such is not merely an item of news included to fill up the paper; it should act as a warning to one and all to be on their guard, for none can foretell when a stray rat may enter their house—rats make no social distinction, but may infest castle and cottage alike. With this knowledge, it behoves us to keep our premises free from rats, and if they are infested to take immediate steps for deratisation.

Last year no special Rat Week was observed in Dundee. A perennial campaign being considered far more effective than a concentrated drive.

Typical of the rat complaints dealt with during 1936, the following may be cited. Inspection after notification of a smell caused a search for rats to be instituted. On flooring boards being lifted a dead rat was located between the deafening of the floor

and ceiling of the house below. Entry to house had been obtained via a broken drain. The necessary precaution in the way of sealing all rat runs has prevented further complaint. Premises used as hen runs were reported to be infested with rats. The disposal of the poultry, after which the locus was thoroughly "gassed," was successful in terminating this nuisance.

At a part of the town where the sewer runs dry overnight, rats were gaining access to houses by way of untrapped street gully gratings. The provision of traps on these fittings made an end of this trouble. In another district a slow-running sewer when suddenly filled through heavy rainfall forced the rodent population to migrate via untrapped gullies. Trapped gullies provided instead of the old open fittings should preclude any exodus in future.

The Milk and Dairies (Scotland) Acts; and Orders.

Registers.—At the end of the year the Registers stood as follows :—

Dairymen or Cow-Keepers	...	...	...	...	28
Retail Purveyors of Milk (including Producer-Retailers)					810
made up as under :—					
Purveyors from shops, milkhouses, etc.	...	...	...	...	727
Purveyors from vans	...	...	...	...	25
Purveyors resident outwith the City but registered to purvey milk within it from vans on streets					26
Purveyors from shops or milkhouses together with vans on streets	...	...	...	...	32

Two of the Registered Cow Sheds do not house any cows—these businesses meantime being carried on as Dry Dairies—outside supplies obtained. Within the remaining 26 Dairies are contained 464 Cows, and to these premises 397 visits of inspection were made, while to shops and places where the retail of milk is carried on the inspectors' visits numbered 2,303. During the year four cowsheds were removed from the Register, in one instance the site became the locus of housing operations.

Generally the dairies have been maintained in a satisfactory manner; limewashing was carried out to schedule and the removal of manure seldom supplied a reason for complaint.

The Bye-Law in respect of the removal of milk after each cow is milked to the milk house, was observed by the Inspectors to be one which certain dairymen did not give effect to, and it was necessary to issue warnings regarding this matter. One dairyman was cautioned for failure to notify a case of infectious disease which occurred in his household.

There are 4 cowsheds where 11 milk cows are kept, exempt from Registration, under Section 2 of the 1914 Act "From which a person sells milk only in small quantities and for their own consumption to persons in his employment or to neighbours."

Generally, Articles 4 to 14 of The Milk and Dairies (Scotland) Order, 1934, are being complied with.

During the year no major works of improvement or alteration were carried out at Dairy Premises warranting detail in this Report.

The Milk (Special Designations) Order (Scotland), 1936, takes the place of the Order of 1930 and became effective, with certain modifications—principally relating to labelling of bottles—as from 1st October, 1936. The former designations are somewhat amended, and we are now left with the major designations of:—

Certified;
Tuberculin Tested;
Standard; and
Pasteurised.

And at the end of the year the register showed that there were licensed by the Local Authority:—

1 Producer of Pasteurised Milk; and
95 Retail Sellers thereof.

A total of 96 as against 89 last year; and

1 Producer Dealer in Tuberculin Tested Milk;
2 Producer Dealers in Certified Milk;
1 Supplementary Licence for dealing in Certified Milk;

and in addition there are registered:—

34 Dealers in Certified and Tuberculin Tested Milks.

In addition to the Designated Milks, there is also on sale within this city milk treated by sterilization, which also obtains a ready sale. While on the subject of milk it might be opportune to speak of the rather unsatisfactory method of sealing milk bottles by the use of waxed discs which are depressed into the rim at the lips of the bottles. From observations, this style of sealing is not all that could be desired, much better would be a covering which would envelop the mouth of the bottles and at the same time over-

lap the lips. Another observation regarding discs—it would be well if bona fide milk bottlers would keep their stock of discs bearing their name or distinctive trade mark in positions secure against the access of predatory fingers, as it is not unknown to this Department that such pilfering has taken place.

Artificial Cream Act, 1929.

An application for registration in terms of the above Act was made in 1936. The request was granted.

Stables and Piggeries.

Stables.—The steady mechanisation of transport is reflected in the number of stables remaining within the city. At the termination of 1936 we had 212—three of which were empty. In comparison with the year 1926 this is 230 less than what was in occupation at that time when we had 442 to supervise, while compared with our figure for last year, it is 70 less.

To these premises 301 visits of inspection were paid, and they were found to be kept in a manner such as would give little cause for complaint. If any small matters called for criticism remedies were promptly applied.

Piggeries.—In most cases pig rearing is carried on in the outskirts of the city, and we have been free from complaints regarding them. Piggeries total 52, including 1 empty, and to these 257 visits were made. The porcine population at last census stood at 677.

Offensive Trades.

There is no alteration falling to be recorded in connection with the premises utilised for this type of business. They are located as undernoted :—

Old Air Station, Stannergate Road—Tallow Melter.

At Public Slaughter-Houses, East Dock Street (Private)—Gut Cleaner (1) and Hide Factors (2).

At Public Slaughter-Houses, East Dock Street (Corporation)
—(a) Slaughterer of Cattle; (b) Tripe Cleaner; (c) Tallow Melter; and (d) Blood Boiler.

No complaints regarding these businesses were received, and all were conducted in a suitable fashion.

Interments.

Section 69 of The Public Health (Scotland) Act, 1897

Applications totalling 48 were received for the interment of persons dying in a destitute condition or whose relatives, through

straightened circumstances, were unable to defray the cost of burial. In one instance other arrangements were made. The remaining 47 applications were granted and the interments carried out at the order of this Department.

A sum of £13 4s 11d, mostly derived from Insurance Policies, was recovered from relatives against a total charge to the Local Authority of £74 4s.

An analysis of the interments carried out shows 5 adults, 26 juveniles, and 16 still-born children.

Burial Grounds.

The following interments were made at the undernoted Burial Grounds within the Burgh during the year:—

Eastern Necropolis	1,378
Western Necropolis	1,050
Western Cemetery (Perth Road)	183
Barnhill Cemetery	199
Parish Church Burying-Ground (Broughty Ferry)	4
Constitution Road Burying Ground	—
St. Luke's Episcopal Church, Downfield	1
New Mains Cemetery	20
Old Mains Cemetery	—
Total	2,855

There have been no changes or alterations made at Burial Places throughout the year. It might be apposite to mention that in Dundee a Crematorium has been completed and is now in use. This edifice is situated in one of the suburbs and is quite a handsome building. It is also taken advantage of by nearby towns which themselves do not possess such facilities.

HOUSING

The Acts, Orders, Regulations and Rules under which the Sanitary Inspector works are all for the well-being of the populace and owing to their fundamental objective might be combined under the categorical title PUBLIC HEALTH.

It is not proposed to detail a list of them here—they are many, and in some cases their titles, to those unacquainted with the vast administrative machinery set in motion by these enactments, might belie their aim.

For example, take the Shops Acts. This legislation is not in existence to harass and bewilder the shopping public as is some-

times the opinion of the late shopper finding a closed door. The primary intention of this special series of Acts is to look after shop assistants, to see that their surroundings are clean, well lit, ventilated and warm, and other adjuncts to comfort provided and to guard them against exploitation by unscrupulous employers. From the short description of the foregoing the relationship to Public Health is discerned.

It will be readily acknowledged then, that HOUSING is closely allied to Public Health; in fact, good housing is an integral part of public welfare.

At once it strikes a person that the undoubted good wrought by the Shops and other Acts, which govern and ensure healthy workplaces, is to a great extent lost if workers have to return to homes which at the best are merely travesties of houses.

This vexed topic of housing, it must be understood, is neither local nor national but universal. Every country in the world is tackling the problem—this in itself shows the clamant necessity for providing decent homes for the people, and no country wants to lag behind its neighbours in this respect.

From the past we can sometimes read the future. Few people, if any, can live in insanitary houses and escape repercussion in some form of ill health, be it an undefined general debility or rheumatism—a disease which is increasing at an alarming rate and one which throws on the scrap-heap of humanity thousands of people who in the normal course of events would have many years of useful service to the community before them.

Some of our present-day population do not remember the War; is it too ambitious to hope that future generations will be equally ignorant of slumdom?

Housing Requirements.

In recent years it has been clearly indicated that the provision of new houses has fallen considerably short of the requirements—more especially when the demands arising from the occupiers of dwelling-houses which the Local Authority have, after consideration, agreed shall be closed for human habitation are taken into account. The year 1936 has shown a material increase in the number of houses erected and completed by the Corporation as from previous years. 725 new dwellings have been provided, but

of these 55 were non-state-aided houses and primarily intended for occupation by persons outwith Slum Clearance. Thus, for the latter purpose our figure is 670, made up as follows:—

32	1-roomed houses.
158	2-roomed houses.
352	3-roomed houses.
128	4 and over roomed houses.

In 1933 the Local Authority indicated in their return to the Department of Health for Scotland that during the following five years their estimate of new housing for all purposes was 2,500 dwellings at the rate of 500 per annum. For the first two years of the estimated period the output of houses fell below the estimated figure, the actual numbers being:

Year 1934	345 houses.
Year 1935	406 houses.
Average over 2 years — 375 houses.	

The past year's figure of 725 raises the annual average more in keeping with the estimated figure. In fact, it will be observed that the figure for 1936 is just short of the completed houses for the two former years. Over the three years the average works out at 492 per annum. But is this enough? Must not the rate of building be accelerated to produce a much higher annual figure? From the following remarks it will be seen that a greater figure should be attained and maintained.

Examining the debit side we find that throughout the year there were considered by the Sub-Committee of the Housing Committee, Joint Reports and Representations embracing 1,933 houses, viz., 984 of 1 room, 826 of 2 rooms, 96 of 3 rooms, and 27 of four rooms or more, and, in addition, at the end of the year 806 dwellings still awaited the consideration and judgment of the Local Authority. In 38 instances the Reports were withdrawn, the properties concerned being otherwise dealt with, while—

674	houses were the subject of Closing Orders;
284	houses were the subject of Demolition Orders;
749	houses were the subject of Undertakings not to Re-Let;
172	houses were the subject of Clearance Resolutions.
16	houses were the subject of Repair Notices.

Thus it is particularly evident that while the number of new houses completed for occupation by persons residing in insanitary

dwellings was in excess of the output of the previous year, the figure 670 for Slum Clearance purposes is far short of the number recorded on the other side of the picture, viz., 1,879. At our present progress almost four years output of new dwellings will be required to meet this year's demand alone.

TABLE 1.

Shows the number of houses which have been erected by the Corporation and private Enterprise during the year 1936:—

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
By the Corporation,	32	182	368	143	725
By Private Enterprise,	12	42	112	125	291
				Total	1,016

This is an increase of 388 on the figure for 1935. As the 291 houses provided by Private Enterprise were mainly for sale to owner-occupiers and in the Corporation total of 725, 55 were built under the 1925 Act (without State aid), thus 670 remain for Slum Clearance purposes in terms of the 1925-1935 Acts.

TABLE II.

The locus of the Corporation Housing Schemes—the number of houses completed; in course of construction; proposed; and the Act under which erected, or to be erected (from data supplied by the Director of Housing).

[illegible]

TABLE III.

Gives the number of houses erected since 1919 by the Town Council.

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919/20 ...	—	116	150	—	266*
1921/25 ...	—	126	536	102	764
1926/30 ...	—	516	1,839	50	2,405
1931/35 ...	—	569	1,419	155	2,143
1936 ...	32	182	368	143	725
Total ...	32	1,509	4,312	450	6,303

*Includes 76 Timber Huts.

The above Table shows 6,303 houses have been provided by the Corporation, or an average of 350 per annum for the past 18 years. During that period, however, a large number of houses has gone out of use as such as is detailed in:—

TABLE IV.

Houses Voluntarily Closed, Closed by Order, Demolished or turned into Business Premises:—

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919/20 ...	63	74	12	20	169
1921/25 ...	106	86	32	47	271
1926/30 ...	376	300	66	86	828
1931/35 ...	856	1,019	196	188	2,259
1936 ...	231	199	25	18	473
Total ...	1,632	1,678	331	359	4,000

This total is equal to an average annual figure of 222 houses closed, against an annual provision of 350, or a net increase of 128 per annum in the City during the period under review.

To arrive at the grand total of houses provided there are other sources of supply which must be taken into consideration, such as closed houses made fit for occupation and re-opened, business premises converted into houses and large houses sub-divided—(Table V.). houses provided by the beneficence of the Fleming and Gray Trusts — (Table VI.), and Private Enterprise—(Table VII.).

TABLE V.

Shops, etc., converted into dwelling-houses; houses reconstructed and re-opened, and large houses sub-divided.

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919/20 ...	22	83	19	15	139
1921/25 ...	27	46	18	25	116
1926/30 ...	19	64	17	34	134
1931/35 ...	99	199	41	79	418
1936 ...	15	17	9	13	54
Total ...	182	409	104	166	861

TABLE VI.

Houses provided by the (a) Fleming, and (b) Peter Gray, Trusts:—

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
(a) By Fleming Trust (Gift of the late Robert Fleming, Esq., LL.D.)	192	158	146	—	496

The extension to this scheme by way of additional houses which are proposed to be erected in the West End of the City, was not commenced during 1936 as anticipated. Plans, however, have been prepared and when these model dwellings have materialised, we will be the proud possessors of 70 to 80 houses, in a district, where there is an undoubted necessity for dwellings of this nature.

(b) By the Peter Gray Housing Trust	24	—	—	—	24
Total					520

TABLE VII.

Houses provided by Private Enterprise.

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919/20 ...	—	—	1	6	7
1921/25 ...	—	1	51	261	313
1926/30 ...	—	2	459	555	1,016
1931/35 ...	2	5	131	555	693
1936 ...	12	42	112	125	291
Total ...	14	50	754	1,502	2,320

These Tables, together, give the sum of 3,701, which figure, added to the Corporation's quota, makes a grand total of 10,004 houses provided during the past 18 years, being an average of 555 houses per annum over that period. From that total, however, we must deduct 4,000, the number of dwellings which have gone out of use as such during the same period, thus giving a net increase of 6,004 houses in the City, or an average annual contribution of 333.

HOUSING (SCOTLAND) ACT, 1925

The Dundee (Blue Mountains, Etc.) Improvement Scheme, 1925; Confirmation Order, 1925, made by the Department of Health for Scotland under the Housing (Scotland) Act, 1925.

This Scheme was completed in 1932.

The Dundee (Small's Wynd) Improvement Scheme, 1928, Confirmation Order, 1929, made by the Department of Health for Scotland under the Housing (Scotland) Act, 1925.

This Scheme was completed in 1935.

Little or no change has occurred to the derelict sites of demolished buildings in this scheme as when last reported on, and there is much room for improvement at the locus. However, throughout the past year buildings which were formerly omitted from the original scheme have been included within proposed Clearance Areas, while others have been dealt with individually in terms of the Housing (Scotland) Acts, 1930/35. No doubt, when the extended scheme is completed, we will have an area which will lend itself to suitable redevelopment.

HOUSING (SCOTLAND) ACTS, 1930/35.

The campaign begun under the above Act in 1930 against insanitary houses and areas in the City is still proceeding, and the result of our efforts to date is set forth in the following tables:—

CLEARANCE AREAS.

(First Instalment.)

The representations made in 1930 embraced some 18 Areas in Wards 1, 4, and 5, involved 304 dwelling houses and 73 other premises. The Director of Housing, in order to develop the area, included 23 houses and 19 other premises.

Altogether 327 Houses were included, of which 299 were occupied by 970 persons.

The position at 31st December, 1936, is :—

All the houses have been vacated and demolished with the exception of one tenemental property and two small supplementary sections, embracing :—

4 Houses, 1 Store and 3 Clubrooms.

(1) **Queen Street, Broughty Ferry**, 4 Areas; and

(2) **The Second Instalment**, 12 Areas;

both Schemes were completed in 1933.

Bog Close and Bogwell Clearance Areas.

Of the 52 houses embraced within the two areas comprising

46 1-roomed houses; .

4 2-roomed houses; and

2 4-roomed houses

only one one-roomed house (now closed by undertaking) was still in occupation at the end of the year. We trust that early this coming year we will be able to write " Finis " to these Areas.

Third Instalment.

Consisted of 57 Areas, situated in Wards 1, 2, 4, 5, 6, and 9, and comprised 834 occupied and 56 unoccupied houses and 100 other premises. In order to satisfactorily develop the various areas, the Director of Housing originally included 111 houses and 80 other premises, while during 1935 a further two houses, including one unoccupied, were added in terms of Section 3, bringing the total number of houses within these Areas to 1,003, having a population to 3,342.

During the year under review, the Clearance Resolution, dated 2nd November, 1933, was rescinded so far as affecting certain properties in Ward VI. comprising 55 houses and 8 other premises occupied by 164 persons. The total number of houses now included within these areas is 948 with a population of 3,178 persons.

The position at 31st December, 1936, is :—

Houses Still in Occupation.

1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
175	187	19	5	386

showing that 562 houses have been Closed or Demolished, viz. :—

	1	2	3	4	
	Room	Rooms	Rooms	Rooms	Total
Prior to Representations, ...	34	18	3	1	56
Since Representations,	239	238	19	10	506
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	273	256	22	11	562

or approximately 59 per cent. of the total houses.

Clearance Areas 92 to 119.

These Areas were dealt with by the Town Council during 1935 and 1936 in terms of Section 1 of the Act.

Clearance Areas 92 to 100 are situated in Wards 2, 3 and 8, and embrace 109 houses and 17 other premises. To make effective schemes and enable the Areas to be satisfactorily developed, an additional 47 houses and 17 other premises were included by the Director of Housing, in terms of Section 3 of the Act, making a total of 156 houses (of which 29 were unoccupied) and 34 other premises. The position at the end of the year shows that only 6 houses have been vacated, leaving 121 houses still occupied.

Clearance Area 101, Ward 2 embraces 43 houses and 5 other premises. To make this scheme effective and enable the Area to be satisfactorily developed an additional 3 houses and 17 other premises were included by the Director of Housing in terms of Section 3 of the Act, making a total of 46 houses (of which 9 were unoccupied) and 22 other premises. The position at 31st December, 1936, shows no progress in the re-housing of the families concerned.

Clearance Area 102, Ward 1.—Embraces 56 houses (of which 13 were unoccupied) and 9 other premises. At the end of the year none of the 43 families had been re-housed.

Clearance Area 103, Ward 8.—Embraces 53 houses and 5 other premises. At Corporation Meeting held on 2nd April, 1936, the Clearance Resolution was rescinded, and it was agreed to apply Closing or Demolition Orders on the whole of the houses concerned. All were, on a later date, dealt with in terms of Section 16 of the Housing (Scotland) Act, 1930.

Clearance Area 104, Ward 8.—Embraces 56 houses (of which 3 were unoccupied) and 1 shop.

At Corporation Meeting held on 6th February, 1936, the Clearance Resolution was rescinded, and it was agreed to apply Closing or Demolition Orders on the whole of the houses. All were, on a later date, dealt with in terms of Section 16 of the Act.

Clearance Areas 105 and 106, Ward 3.—Clearance Resolution, 2nd July, 1936, embrace 8 houses. In order to satisfactorily develop the areas the Director of Housing, under Section 3 of the Act, included 7 houses and 13 other premises, bringing the total number of dwellings within these areas to 15, having a population of 69. At the end of the year all the houses were still occupied.

Clearance Area 107, Ward 12.—This area was represented by the Medical Officer of Health, embracing 37 houses (including 1 voluntarily closed and unoccupied) and two other premises. The Slum Visitation Committee, when inspecting the locus, recommended that closing orders be applied, and the dwellings have since been dealt with as individual unfit houses in terms of Section 16 of the Act.

Clearance Area 108, Ward 6.—Represented by the Medical Officer of Health in 1935, embracing 15 houses (including 3 voluntarily closed and unoccupied) and 3 other premises. Total population in area, 42. The Corporation later agreed to substitute action under Section 16 of the Act instead of passing a Clearance Resolution.

Clearance Area 109, Ward 6.—This area was represented by the Medical Officer of Health in 1935, and embraced 35 houses (including 8 voluntarily closed and unoccupied) occupied by 97 persons. The Representation also included 13 other premises. The sub-committee when visiting the area departed from the proposed Clearance Area and recommended that all the houses be dealt with in terms of Section 16 of the Act.

Clearance Area 110, Ward 12.—Clearance Resolution, 1st October, 1936, embracing 24 houses occupied by 82 persons, was represented by the Medical Officer of Health during 1935, and in order to satisfactorily develop the area the neighbouring dairy premises were included under Section 3 of the Act by the Director of Housing. At the end of the year all the houses were still in occupation.

Clearance Area 111, Ward 4.—Clearance Resolution, 1st October, 1936. Embraces 26 houses (including 2 closed by order, occupied) (3 closed by order, unoccupied) (4 closed by undertaking, unoccupied) and (1 voluntarily closed and unoccupied), and 1 other subject. In order to satisfactorily develop the area the Director of Housing included 1 store. There was no change in the position at the end of the year.

Clearance Area 112, Ward 8.—Clearance Resolution, 1st October, 1936. Embraces 6 houses all of which were previously dealt with as individual unfit houses. At 31st December, 1936, the 6 dwellings were still occupied.

Clearance Areas 113, 114 and 115, Ward 8.—Clearance Resolution, 1st October, 1936. Embrace 53 houses and 9 other premises (including 1 house and 4 other premises) included by the Director of Housing under Section 3 of the Act. All the houses represented by the Medical Officer of Health were formerly dealt with as individual unfit houses in terms of Section 16 of the Act. At the end of the year 15 of the dwellings were unoccupied.

Clearance Areas 116 and 117, Ward 9.—Clearance Resolution, 1st October, 1936. Embrace 29 Houses occupied by 102 persons, and 8 other premises, 3 of which were included by the Director of Housing in terms of Section 3 of the Act. The position at the end of the year was unchanged, none of the families having been displaced.

Clearance Area 118, Ward 12.—Clearance Resolution, 9th November, 1936. Embraces 23 houses with a population of 108. There was no change in the position at 31st December, 1936.

Clearance Area 119, Ward 11.—Clearance Resolution, 3rd December, 1936. Embraces 28 houses having a population of 73, including 3 houses added by the Director of Housing in terms of Section 3 of the Act. At the end of the year 7 of the dwellings were unoccupied.

Redevelopment Area.

The Corporation, at their meeting held on 3rd January, passed a resolution declaring that the area known as John Street Area be a redevelopment area. Embraced within this scheme are 476 houses (including 2 voluntarily closed and 2 combined shop-houses) with a total population at date of inspection of 1,861. 194 of the dwellings inhabited by 747 persons were considered as

not being in all respects reasonably fit for human habitation, 62 of which, mainly attic and ground floor houses were dealt with individually in terms of Section 16. The position at the end of the year is that the redevelopment plan along with a note of objections is in the hands of the Department of Health for Scotland for their consideration.

Insanitary Buildings.

Since 1924, the year in which the Post-War Housing Policy of the Council was inaugurated, 955 Reports and Representations have been submitted to the Local Authority in order to deal with uninhabitable, insanitary, and obstructive buildings or areas.

The total number of houses has now reached 8,985 and the following tables show, in detail, the position as at 31st December, 1936.

REPRESENTED.

Year	No. of Representa- tions	No. of Rooms				Total Houses	No. of other Premises	
		1 Room	2 Rooms	3 Rooms	4 Rooms & over			
1924/25	... 17 & 1*	112	69	5	2	= 188	26	
1926/30	... 237 & 19*	877	985	130	49	= 2,041	173	
1931/35	... 310 & 119	1,860	2,171	255	81	= 4,367	371	
1936	..... 242	1,039	1,063	100	23	= 2,225	...
1936	..... 10*	39	109	10	6	= 164	24
		955	3,927	4,397	500	161	= 8,985	594

*Improvement or Clearance Area.

Of the 8,985 houses Represented or Reported :—

467 have been rendered fit under Repair Notices ;

211 have been rendered fit under Undertakings, etc. ;

while 1,564 houses, declared to be unfit are still in occupation made up as follows :—

802 Individual Unfit Houses ;

762 Houses in Clearance Areas.

Closing or Demolition Orders.

Section 16 (1).

239 Reports, involving 2,209 houses, were made to the Local Authority in terms of the above section, and were disposed of as follows :—

Demolition Orders were served upon the owners of 255 houses, viz. :—

- 80 one-roomed houses ;
- 151 two-roomed houses ;
- 22 three-roomed houses ; and
- 2 four-roomed houses.

Closing Orders were served upon the owners of 507 houses, viz. :—

- 318 one-roomed houses ;
- 176 two-roomed houses ;
- 8 three-roomed houses ; and
- 5 four-roomed houses.

Seven Reports withdrawn involving 30 houses, viz. :—

- 1 one-roomed house ;
- 23 two-roomed houses ; and
- 6 three-roomed houses.

97 Reports, involving 806 houses, await consideration by the Local Authority, viz. :—

- 378 one-roomed houses ;
- 392 two-roomed houses ;
- 31 three-roomed houses ; and
- 5 four or more roomed houses.

Fifty-five owners gave undertakings not to let for human habitation until rendered fit for that purpose, 611 houses, viz. :—

- 258 one-roomed houses ;
- 313 two-roomed houses ;
- 30 three-roomed houses ; and
- 10 four or more roomed houses.

Repair Notices.

SECTION 14.

3 Reports, involving 16 houses, were made to the Local Authority in terms of the above Section, viz. :—

- 4 one-roomed houses ;
- 8 two-roomed houses ;
- 3 three-roomed houses ; and
- 1 four-roomed house ;

and of these five were rendered fit for human habitation.

Reports Awaiting Consideration from 1935.

At the end of the previous year Reports and Representations submitted to the Local Authority, embracing some 350 houses, were awaiting consideration. During the year under review they were dealt with as follows :—

4 one-roomed houses ; and

4 two-roomed houses

were, in terms of Section 1, the subject of Clearance Resolutions, while 334 houses were closed under Section 16 as follows :—

5 one-roomed houses ;

15 two-roomed houses ;

8 three-roomed houses ; and

1 four-roomed house by way of **Demolition Orders**.

104 one-roomed houses ;

58 two-roomed houses ;

4 three-roomed houses ; and

1 four-roomed house closed by **Closing Orders** ;

while the Local Authority accepted **Letters of Undertaking** embracing :—

88 one-roomed houses ;

44 two-roomed houses ;

5 three-roomed houses ; and

1 four-roomed house.

One Report involving the remaining 8 houses was withdrawn.

Summary in regard to Housing conditions and alterations during 1936.

I.—Particulars of Houses (287) Improved :—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) At properties that had been "Closed by Order" for a period	15	20	1	—
(b) At instance of Sanitary Inspector, but not "reported" to Committee	9	72	7	6
(c) After Plans had been submitted to and approved of by the Works Committee	9	80	23	12
(d) Two or more houses made into one	—	1	4	2
(e) Houses divided and improved	3	4	3	11
(f) After Notice under Sec. 14	2	1	1	1

II.—Shops and other premises converted into dwelling-houses (7) :—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) 5 Shops	1	3	—	1
(b) 1 Workshop	—	1	—	—
(c) 1 Hall (part)	—	1	—	—

III.—New Houses completed and ready for occupation during the year :—

(a) Under the Corporation Housing Schemes.

	1 Room	2 Rooms	3 Rooms	4 Rooms
Ward IV., (a) Mid-Craigie—1st Development; (b) Maitland Street;				
(c) Dens Road	32	90	280	104
Ward V., (a) Graham Street; (b) Fairbairn Street	—	80	40	39
Ward VII., Hospital Street	—	12	36	—
Ward IX., Cross Row	—	—	12	—
Total Houses — 725.				

(b) By Private Enterprise.

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
Ward 1	—	—	—	2
Ward 2	—	—	16	1
Ward 3	—	—	9	28
Ward 4	—	—	8	22
Ward 5	—	40	40	8
Ward 7	—	1	36	26
Ward 8	—	—	1	9
Ward 9	—	1	2	21
Ward 10	—	—	—	4
Ward 11	—	—	—	3
Ward 12	12	—	—	1

Total, 291 houses.

Giving a grand total of 1,016 new houses erected throughout the year.

IV.—Particulars of dwelling-houses Closed (473) for human habitation during the year 1936 in whole or in part and vacated :—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) Voluntarily — houses generally in very bad repair, very damp, and not reasonably fit for human habitation	—	5	4	—
(b) Converted into business premises, offices, shops or workshops, etc.	2	1	—	—
(c) By absorption into other houses ...	7	10	1	10
(d) Closed by Order or Demolition				
Order	50	30	5	3
(e) Clearance Areas	119	96	14	5
(f) Closed by Undertaking	53	57	1	—
Total	231	199	25	18

V.—Dwelling-houses Demolished (259) during the year 1936 :—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) Dwelling-houses that had been Closed by Order or Demolition				
Order	41	12	1	1
(b) Dwelling-houses that had been Closed Voluntarily	9	5	6	2
(c) Clearance Areas	62	99	13	3
(d) Dwelling-Houses that had been Closed by Undertaking	2	3	—	—
Total	114	119	20	6

In addition to the above, 44 other premises were demolished, viz. :—

4 Workshops	13 Stores	16 Shops
1 Garage	1 Dairy	5 Offices
1 Bakehouse	1 Dentist's Rooms	1 Hall
1 Jute Works.		

VI.—Net Results for 1936 :—

The net result for the year is that there are 597 more houses available for human habitation than at 31st December, 1935, i.e., houses of :—

1 Room	2 Rooms	3 Rooms	4 Rooms and over
172 less	42 more	464 more	263 more

VII.—The total number of Dwelling-houses (Private and Corporation) in course of erection (921) — all stages—at 31st December, 1936, is as follows:—

		1	2	3	4 Rooms
		Room	Rooms	Rooms	& over
Ward 1	.....	—	—	—	38
Ward 3	.....	32	—	160	159
Ward 4	.....	—	36	68	60
Ward 5	.....	32	12	52	5
Ward 6	.....	—	—	—	6
Ward 7	.....	—	—	69	20
Ward 8	.....	—	—	45	11
Ward 9	.....	—	—	—	17
Ward 10	.....	—	—	30	31
Ward 11	.....	—	—	—	38
Total		64	48	424	385

VIII.—Estimated Number of Inhabited Houses excluding Institutions and other large establishments within the Burgh of Dundee as at 31st December, 1936—corrected (added to and deducted from). Based on Census Return of 26th April, 1931, viz. :—46,229 houses.

Year.	1 Room		2 Rooms		3 Rooms		4 Rooms and over		Total
From Census Return	Add.	Deduct.	Add.	Deduct.	Add.	Deduct.	Add.	Deduct.	
	6,347		22,252		10,405		7,225		46,229
	or 13.7%		or 48.2%		or 22.5%		or 15.6%		
1931 ...	—	27	—	4	286	—	54	—	309
1932 ...	—	105	31	—	328	—	87	—	341
1933 ...	—	213	—	116	387	—	183	—	241
1934 ...	—	175	—	4	240	—	94	—	155
1935 ...	—	67	—	11	292	—	183	—	397
1936 ...	—	172	42	—	464	—	263	—	597
	—	759	73	135	1,997	—	864	—	48,269

Thus giving at 31st Dec., 1936:—

5,588	22,190	12,402	8,089
or 11.58%	or 45.97%	or 25.70%	or 16.75%

of which 3,768 are Owner Occupied, viz. :—

2	55	296	3,415
or .035%	or .24%	or 2.38%	or 42.21%

Overcrowding.

In the Report for 1935 full details were provided of the results of the preliminary survey carried out in terms of the Housing (Scotland) Act, 1935. There yet falls to be carried out the second survey, which necessitates the measurement of rooms and will in all probability add to the number of houses considered to be overcrowded. While no new housing schemes have been set apart for the rehousing of families living in overcrowded conditions, this question has not been lost sight of.

Many of the houses which have been dealt with by way of Closing and Demolition Orders are, in addition to being in a dilapidated and insanitary state, seriously overcrowded, and as the supply of new houses fell short of the demand it was agreed by the Housing Committee that the worst cases be given first consideration for re-housing, and towards this end a pointage system was arranged. By this, consideration is given to (a) the condition of the dwelling; (b) overcrowding; (c) dwellings occupied by members of more than one family; and (d) health history of the members of the family, with special attention to the incidence of tuberculosis. Intimation of the pointage credited to each family requiring to be displaced is transmitted to the City Factor, who thus has a guide by which he is able to re-house the most deserving cases as opportunity occurs.

IX.—The Official Return submitted to the Department of Health for Scotland for the year ended 31st Dec., 1936, is :—

Housing (Inspection of District) Regulations (Scotland) 1928.

1. Number of dwelling-houses inspected*

(a) during the year	-	-	(a)	1588
(b) since 1st January 1931	-	-	(b)	6698

2. Number of dwelling-houses which, on inspection, were considered to be in any respect unfit for human habitation

(a) during the year	-	-	(a)	1449
(b) since 1st January 1931	-	-	(b)	4430

Burgh Police (Scotland) Act, 1892.

3.	Number of houses in respect of which notice was given during the year under Section 246 requiring provision of a sufficient water-closet	Nil	
4.	Number of houses where requirements were complied with by owners during the year	Nil	
5.	Number of houses where works carried out by Town Council during the year after failure of owners to do so	Nil	Section 246
6.	Number of houses for which water-closets were provided during the year at instance of Town Council without formal notice under Section 246	211	not adopted
7.	Number of houses in respect of which notice was given during year under Section 246 requiring provision of inside water supply and sink	Nil	by this
8.	Number of houses in which requirements were complied with by owners during year	Nil	Burgh
9.	Number of houses in which works carried out by Town Council during year after failure of owners to do so	Nil	
10.	Number of houses in which inside water supply and sink were provided during year at instance of Town Council without formal notice under Section 246	19	

Housing (Scotland) Act, 1925.

11.	Number of houses of (a) one apartment, and (b) two apartments, for the erection of which the consent of Town Council was given in (a) terms of Section One Hundred and Eleven (b)	Nil. 4
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Housing (Scotland) Act, 1930.

12.	Number of dwelling-houses in respect of which notices were served during year under Section 14 (1)†	- - - 16
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13.	Number of dwelling-houses rendered fit for human habitation during year following on notices under Section 14 (1)†	-	-	5
14.	Number of dwelling-houses in respect of which work has been done during year by Town Council under Section 15 (1).	-	-	Nil.
15.	Number of dwelling-houses in respect of which, in terms of Section 17, a demolition order or closing order under Section 16 (3) has been substituted during year for a notice under Section 14 (1)	-	-	Nil.
16.	Number of dwelling-houses in respect of which notices were served during year in terms of Section 16 (1)	-	-	1175
17.	Number of dwelling-houses in respect of which, following on notice under Section 16 (1) :--			
	(a) undertaking has been given during year that the house will not be used for human habitation until it has been rendered so fit	-	-	630
	(b) undertaking has been given during year that house will be rendered fit	-	-	Nil.
	(c) demolition orders have been made during year under Section 16 (3)†	-	-	194
	(d) closing orders have been made under Section 16 (3) and (4)	-	-	351
18.	Number of dwelling-houses rendered fit during year following on undertakings under Section 16 (2)	-	-	24
19.	Number of dwelling-houses rendered fit for human habitation during year at instance of Town Council without formal notice under Housing (Scotland) Act, 1930	-	-	Nil.
20.	Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by Town Council during year following upon houses having been rendered fit for human habitation	-	-	Nil.
21.	Number of houses in respect of which advances have been made during year in terms of Section 34 towards cost of repairs and amount so advanced	-	-	Nil.

*Houses inspected more than once should be entered only once.

†If action for repair of houses has been taken under other Powers please state these Powers and number of houses dealt with.

‡If permission to reconstruct a building has been granted, the number of houses existing prior to the reconstruction should be stated (see in this connection, sub-section (3) of Section 49 of the Housing (Scotland) Act, 1930).

Note.—Any general information or observations as to the character of defects usually found to exist, as to the extent to which overcrowding was found to prevail and the steps taken to remedy it, or as to the work of inspection generally, should be entered in the space below :—

Inadequate lighting and ventilation; dampness in houses; houses not provided with sinks and inside water supplies; insufficient water closet accommodation; want of suitable storage for foodstuffs and fuel; insufficient refuse storage accommodation; lack of facilities for the washing and drying of household and wearing apparel; and open spaces around buildings restricted.

Overcrowding is still prevalent within the city and so far as information is available little or no alteration has occurred since the preliminary survey carried out in accordance with the Housing (Scotland) Act, 1935. In overcrowding cases where there are members of a family suffering from tuberculosis, particulars are forwarded to the City Factor with a view to re-housing as opportunity occurs.

The Rent and Mortgage Interest Restrictions Acts, 1920 to 1935.

Year	BY TENANTS.			BY OWNERS.		
	No. of Applications	Granted	Refused	No. of Applications	Granted	Refused
1920/25	116	102	14	1	1	—
1926/30	42	36	6	9	8	1
1931	2	2	—	1	1	—
1932	713	677	36	149	148	1
1933	83	70	13	142	136	6
1934	148	108	40	19	19	—
1935	165	154	11	13	13	—
1936	324	300	24	52	51	1
1593	1449	1449	144	386	377	9

From the above tables it will be noted that during 1936, 324 applications in terms of the above Acts were received at this Office from tenants desiring Certificates to the effect that their houses were in disrepair. This is nearly double the number asked for in the preceding year, and 300 or practically 93 per cent. were granted.

Regarding the 24 applications which were refused, the reasons for refusal were houses outwith the Acts, withdrawals of applications, tenants removing, and defects upon notification to the house agents being remedied, etc.

Common Lodging Houses.

The following premises within the Burgh are registered as Common Lodging Houses having accommodation undernoted :—

	Lodgers	
	Male	Female
53 Commercial Street,	236	—
3/5 Craig Street,	137	—
*19 Overgate,	51	—
*43 Overgate,	39	—
25 North Lindsay Street,	56	—
*130 Overgate,	16	22
*77 Overgate,	—	36
*97 Overgate,	53	38
67 Cowgate,	19	—
35 Cowgate,	11	—
	<hr/> 618	<hr/> 96
	<hr/> <hr/>	<hr/> <hr/>

*Denotes having been dealt with under Housing Acts.

It will be observed that several of these places have been dealt with under the Housing Acts and are now the subject of Closing or Demolition Orders.

Early in the year the question of adequate means for escape in the event of fire was raised, and a committee who were delegated to enquire into the question visited the buildings. Apart from the original cause of their inspection it was agreed that certain of the premises were fit subjects for inclusion among properties to be considered by the Housing and Factorial Committee, and to

that end instructions were given to the officials concerned to submit Joint Reports in terms of Section 16 of the Housing (Scotland) Act, 1930.

These particular buildings are long past their prime and difficult to maintain up to the standard which we desire, and, in the light of present-day requirements, are not suited for the business of keeping lodgers. One of the houses in question changed from receiving both sexes within its portals to catering for females only.

A provisional registration was granted to the keeper of a large establishment where certain very necessary repairs, etc., were required and regarding the execution of which delay was being experienced. This temporary registration had the desired effect, and before the date of expiry the required work was accomplished and regular registration reverted to.

To these places the inspections totalled 601—585 by day and 16 by night.

The SEAMENS' BOARDING HOUSE (DUNDEE SAILORS' HOME AND HOSTEL) and the SALVATION ARMY HOME AND METROPOLE FOR WOMEN are well kept—clean and comfortable, the former also being available for commercial "boarders."

Houses Let in Lodgings.

229 visits by day were paid to these premises, which numbered 102 at the end of the year.

We have still within our midst a number of those houses which are Common Lodging Houses in all but name, their exclusion from the latter title being governed by the fixed weekly charge being in excess of 7/-. A number might be categorised better as "Farmed Out Houses," and to them more regular and systematic inspection had to be given. This form of business has given rise to complaints on the part of bona fide lodging-house keepers, and it may be necessary in the near future to reconsider the Bye-Laws pertaining to Houses Let in Lodgings in order that the powers governing this class of business are extended and strengthened.

Generally the Houses Let in Lodgings have been maintained satisfactorily.

Tents and Vans.

Within the past few years, and especially during the good weather, camping and caravan holidays have appealed more and more to the public taste. That either makes a healthy, carefree holiday is admitted, but in the interests of holidaymakers and general public alike it is essential that the camping grounds shall be suitable for the purpose.

Tents and vans placed haphazard at the owner's fancy on land lacking sanitary conveniences and water supply are on the highway to becoming a nuisance. With this in mind a clause bearing on tents and vans was included in the Dundee Corporation Order, 1935, vesting the Local Authority with powers which can, should the occasion arise, be set in motion to ensure that camping sites within our area are maintained in a fashion conforming to hygienic standards. Regarding Dundee, there is little to record under this heading. Our caravan dwellers, with few exceptions, are part of the carnivals, etc., which pay annual visits to the City.

One complaint was received regarding smoke nuisance from caravans in the west end of the city. This is a community of eight vans located on ground where water closet accommodation and water supply are available. Inspector's advice as to suitable fuel was followed and, with the removal of the principal offender to another position, no further trouble has been experienced.

To these particular types of dwelling 70 visits were paid.

Housing of Seasonal Outworkers.

No necessity arose for housing this class of worker in Dundee during 1936. All who found employment of this nature were recruited from the City population and daily transported to and from their work.

Factories and Workshops.

Regular inspections, totalling 1,349 during the year, were paid to these premises, and in connection therewith nothing of moment falls to be registered. Any defects discovered were of a trifling character and were easily and immediately remedied.

Our greatest concern is to see that employees are comfortably accommodated during their working hours, adequately catered for regarding sanitary conveniences, heat, light and ventilation. It may be accepted that all the foregoing requirements are being observed.

On 40 occasions attention was directed in cases where the state of cleanliness fell below the level we like to see maintained. No delay occurred in giving effect to our requirements.

Throughout the year 29 Intimations were received from H.M. Inspector of Factories regarding his having served Notices in connection with the following :—

No.	Nature of Defect.	Improvements Effectuated.
1	Unsatisfactory condition of bakehouse.	Yes.
8	Insufficient Water Closet Accommodation.	In 4 cases.
3	Unsuitable or defective Water Closet Accommodation.	In 1 case.
3	No separate Accommodation for Sexes.	In 2 cases.
14	Want of Ventilation.	In 5 cases.
—		
29		

The following Workshops, etc., are upon the Register at 31st December, 1936 :—

TRADE OR BUSINESS.	Workshops	Domestic Workshops	Homeworks	Workplaces
Blacksmiths, Cartwrights and Carriage Builders	10	1	0	12
Boot Repairers	67	5	0	0
Cabinetmakers, Joiners, and French Polishers	57	0	0	0
Cycle and Motor Mechanics, Enamellers and Vulcanisers	40	0	0	1
Dental Mechanics	34	6	0	0
Dress, Mantle, and Corset Makers	41	14	0	0
Engineers	28	0	0	0
Electro - Platers, Wire Workers, Blind Makers and Bellhangers	4	0	0	0
Florists	0	0	0	25
Furriers	5	2	0	1
Granite and Marble Cutters, and Masons	0	0	0	25
Hairdressers and Wigmakers	2	2	0	140
Hotels and Restaurants	0	0	0	47
Milliners	25	2	0	0
Painters	3	0	0	53
Photographers	10	0	0	1
Piano and Gramophone Repairers	7	0	0	0
Picture Framers, Gilders, and Glaziers	7	0	0	1

Plasterers	0	0	0	20
Plumbers and Tinsmiths	50	0	0	0
Saddlers and Leather Cutters	6	0	0	0
Slaters	0	0	0	23
Stamp Cutters, Engravers and Ticket Writers	2	0	0	1
Sugar Boilers	6	0	0	0
Tailors	44	11	0	0
Umbrella Makers and Repairers	3	0	0	0
Underclothing, Baby Linen, and Blouse Makers, Hosiers and Knitters... ..	24	1	0	0
Upholsterers and Carpet Sewers	8	1	0	0
Waste, Rag and Metal Merchants	5	0	0	9
Watch and Jewellery Repairers and Opticians	35	4	0	0
Miscellaneous, i.e., Gut Manufacturer, Mica Makers, Clay Pipe Makers, Paper Bag Makers, Bottlers, Potted Meat Manufacturers, Oil Refiners, Manufacturing Chemists, Sack Repairers, Laundries, Basket Makers, Brush Makers, Scale Makers, etc.	62	1	0	11
	585	50	0	370

Bakehouses.

The following bakehouses are upon the Register :—

Occupied factory bakehouses,	54
(Included in this number are 8 underground).	
Occupied workshop bakehouses,	37
(Included in this number are 3 underground).	
Bakehouses empty but fit for occupation, ...	2

Establishments wherein the business of baking is carried on received 853 visits of inspection throughout the year. It may be taken as fact that these premises are conducted in a manner appropriate to the cleanliness which the trade they are utilised for demands.

At one bakehouse H.M. Inspector of Factories called upon the occupier to carry out certain works which would have involved a considerable expenditure. The building containing this bakehouse was "obstructive," and for years had been the cause of dampness in adjoining properties. The rental of the premises was very low, and the agents were approached on the subject of demolition. The benefit that would be experienced by nearby tenants on the removal of the bakehouse was appreciated by the agents.

and accordingly the building was razed to the ground and the site covered with cement concrete.

A bakehouse erected within the city can boast of the most modern plant and appliances. Every phase of baking; be it the "staff of life" or "fancy" cakes, etc., is catered for, and actual handling of materials reduced to the merest minimum. Oil firing is used for generating heat in the ovens and hotplates. The main bakehouse floor is tiled, which permits of quick and thorough cleaning with a minimum expenditure of labour. The internal walls are in white tiles and the back elevation of ovens in white glazed brick—both of which facilitate and speed up cleansing. The requirements under the Bakehouses Welfare Order are more than met in the hygienic conveniences provided.

A machine performs the threefold duty of slicing, wrapping and sealing bread. This itself should be a commendation to housewives who greatly appreciate the delivery of wrapped bread as opposed to the older fashion of bare loaves being carried up to house doors by messengers; we would like to see an extension of this practice. Altogether this is a bakehouse which will surely for a long time be entitled to the terms modern and up-to-date.

FOOD INSPECTION

Shops, Stalls, Barrows, Etc.

On 93 occasions it was necessary to seize food as unfit for human consumption.

ARTICLES OF FOOD SEIZED.

ARTICLES.	WHERE SEIZED.	QUANTITIES OR WEIGHTS.				REASONS FOR SEIZURE.
		Tons.	Cwts.	Qrs.	Lbs.	
Pork and Beans (tinned) ...	Shops, or stalls, or barrows on streets, or food or wholesale stores, or railway stations.	0	0	0	17	Decomposition, etc.
Spiced Ham		0	5	1	22	
Mutton (tinned)		0	1	2	0	
Milk (tinned)		0	1	0	0	
Beef (tinned)		0	3	2	15	
Fruit (tinned)		0	15	3	14	
Eggs (tinned)		0	1	0	21	
Jellied Veal, etc. (tinned)		0	7	0	14	
Chicken and Ham Roll, etc.		0	1	2	6	
Fish (tinned)		0	0	2	24	
Tongue (tinned)		0	0	2	5	
Vegetables (tinned) ...		0	1	0	9	
Peas, Beans, Tomatoes etc. (tinned)		0	2	0	17	
Pork		0	0	3	12	
Vegetables		2	16	2	0	
Luncheon Meat		0	2	1	6	
Fruit		0	0	1	12	
Soup (tinned)		0	0	0	6	
Tomato Puree		0	2	3	25	
Rabbit (tinned)		0	0	0	12	
Fruit Pulp (tinned) ...		0	0	2	19	
Miscellaneous		0	0	0	11	
Smoked Fish etc. ...		0	0	1	9	

The foregoing Table records the quantity and description of Foodstuffs which were, upon submission for inspection, judged to be unsound and consequently destroyed.

It will be observed that as in former years the bulk of the articles so dealt with were of the "tinned" variety.

Food Inspection is not merely a title for a section of this Report, but a very vital part of the duties which are carried out by this Department. During the period under discussion 4,147 visits were paid to shops, stalls, etc., to ensure that the standard of cleanliness demanded in the preparation, storage and handling of food was being maintained. Should there be anything which is not in keeping with the ideal aimed at, the responsible party's attention is directed thereto and a warning, usually with satisfactory results, issued.

The coming into force of the Dundee Corporation Order, 1935, brought a welcome extension to our powers regarding the supervision of food shops. By Clause 33 of the aforementioned Order the occupier of any premises used for the sale, preparation or storage of food stuffs, and every person who uses any cart, basket or other article or thing for the disposal or sale of foods which are liable to contamination by contact with unclean conditions, who does not keep same clean and in good condition is liable to the penalty prescribed in the Section.

The Public Health (Meat) Regulations (Scotland), 1932.

At the end of the year there was no registration in force in terms of Article 15 of the above Regulations—the sales from vans of meat and meat food products being a subsidiary line in connection with shops possessing ample storage accommodation.

FOODSTUFFS ARRIVING AT THE PORT OF DUNDEE, EITHER DIRECTLY FROM ABROAD OR BY COASTWISE TRAFFIC.

The following two tables show the kind and quantity of foods arriving by waterway at the Port during the year.

The total is 65,125 tons 10 cwts. 2 qrs., as against 51,153 tons 12 cwts. 0 qrs. last year, and 67,656 tons 11 cwts. 3 qrs. in 1934.

TABLE No. I.

Shows the foodstuffs arriving coastwise at the Port by steamers plying between Dundee and the Ports of London, Hull, Liverpool, Aberdeen, Newcastle, Belfast, Southampton, Leith, etc.

				Tons.	Cwts.	Qrs.
Baking Powder	...	...	...	1	17	2
Bacon and Ham	...	...	...	4	2	3
Biscuits	...	...	...	183	12	1
Bran	...	...	...	401	0	0
Butter	...	...	...	60	7	3
Cereals	...	...	...	336	5	0
Cheese	...	...	...	392	0	2
Baking Oil	...	...	...	81	8	0
Cordials, Cider, &c.	...	...	...	53	19	1
Cocoa and Cocoa Beans	...	...	...	74	8	1
Cocoa Butter	...	...	...	5	1	1
Barley Flour	...	...	...	0	2	0
Cocoanuts	...	...	...	33	9	2
Cocoanut Oil	...	...	...	20	15	2
Coffee	...	...	...	44	0	1
Confectionery	...	...	...	699	13	3
Cream of Tartar	...	...	...	126	13	2
Custard Powder	...	...	...	22	12	3
Eggs	...	...	...	18	15	1
Eggs (Liquid and Dried)	...	...	...	0	0	1
Fish (Salted Herrings)	...	...	...	1	15	3
Fish (Dried)	...	...	...	0	12	1
Fish (Tinned)	...	...	...	150	19	0
Flour	...	...	...	8,529	5	1
Fruit	...	...	...	1,688	18	3
Fruit (Dried)	...	...	...	396	15	1
Fruit (Pulp)	...	...	...	107	16	3
Fruit (Tinned)	...	...	...	561	6	3
Glucose	...	...	...	638	5	2
Lard and Lard Compound	...	...	...	736	16	1
Macaroni	...	...	...	0	10	2
Margarine	...	...	...	1,746	19	3
Meat Extract	...	...	...	44	12	1
Meat (Tinned)	...	...	...	163	5	1
Milk (Dried)	...	...	...	3	17	2
Milk (Tinned)	...	...	...	238	4	1
Nuts	...	...	...	32	0	0
Nut Oil	...	...	...	10	16	0
Peas, Beans, &c.	...	...	...	12	14	2
Honey, Jams, &c.	...	...	...	0	19	1
Pickles, Spices, Condiments and						
Sauces	...	...	...	62	0	1
Preserves	...	...	...	124	4	0
Rice	...	...	...	58	10	0
Sago and Semolina	...	...	...	11	1	0
Suet	...	...	...	0	6	2
Treacle Meal	...	...	...	0	3	0

	Tons	Cwts.	Qrs
Sugar	3 280	10	0
Syrup	672	1	2
Tapioca	92	8	2
Tinned Soup	22	18	0
Treacle	429	1	1
Vegetables	379	17	0
Vegetables (Tinned)	29	18	3
	<hr/> 22,789	15	3

TABLE No. II.

Shows the amount and kind of foods arriving direct from abroad.

	Tons.	Cwts.	Qrs.
Baking Oil	1	5	0
Baking Soda	2	0	0
Butter	29	1	0
Cereals	162	2	2
Cheese	252	7	3
Cream of Tartar	26	0	0
Cocoanuts	51	16	2
Cocoa Butter	46	4	0
Confectionery	0	2	0
Flour	5,539	0	3
Fruit	33	0	0
Fruit Dried	31	5	0
Fruit (Pulp)	164	10	0
Fruit (Tinned)	92	7	2
Glucose	802	12	0
Ground Nut Oil	0	14	0
Lard	33	16	0
Macaroni	9	3	3
Margarine	3	3	0
Meat (Tinned)	47	4	2
Milk (Dried)	2	0	0
Milk (Tinned)	490	11	3
Mineral Waters, Cordials &c.	11	0	0
Peas, Beans, &c.	70	19	0
Pickles, Spices, &c.	0	18	1
Pork and Beans	37	7	2
Rice	31	4	2
Ground Rice	19	10	0
Soup Tinned	1	18	2
Sugar	33,298	6	2
Vegetables	1023	14	0
Vegetables (Tinned)	20	9	2
	<hr/> 42,335	14	3

No conditions were evident to justify the retention of any of the foodstuffs arriving by waterway.

Fish Inspection at the Fish Market, Carolina Port.

On no occasion was it necessary to seize fish arriving at the Fish Dock, and action by this Department in respect of the premises was unnecessary.

Public Slaughter-House, Meat and Cattle Market.

These premises, owned by the Corporation, and conveniently arranged in close proximity to each other, are under the supervision of Mr John D. Anderson.

During his management the buildings forming the Slaughter-House and Meat Market have been entirely reconstructed and modernised, and fitted with the latest equipment and appliances—including stunning pennage—to ensure that all animals are speedily and humanely killed, the carcasses rapidly dressed and examined; and to promote general cleanliness. The advantage of a centralised system can be readily appreciated when it is understood that all animals to be used for human food within the city are slaughtered within these premises, and their carcasses, as well as all carcasses brought to the city, including imported meat are carefully examined by qualified meat inspectors so that only meat fit for human food is allowed for sale.

In addition, there have been introduced a well equipped tripery and a waste utilisation plant, the latter being for the manufacture of the by-products of the Slaughter-House into fertilisers, such as meat and bone meal, meal from waste intestines and stomachs, and blood meal, all of which are valuable manures and obtain a ready sale.

For the preservation of meat, capacious cold stores have been provided to accommodate the carcasses of 200 cattle, 200 sheep and 150 pigs. Such stores are very necessary, and form a valuable adjunct to the Meat Market. As an extension to existing improvements it is proposed to erect a new cattle market in place of the present one, and when this has materialised the work of modernisation will have been completed, and the whole of the premises, including Slaughter-House, Meat and Cattle Markets will be of a standard unsurpassed anywhere in Scotland.

The following Table shows the number of animals slaughtered and the amount of meat found to be unfit for human consumption and condemned at the Public Slaughter Houses.

Class of Animals	Number of Animals.			Weight (in lbs.) of condemned meat and offals.
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle,	16,123	270	4,530	263,901
Sheep,	28,571	60	1,524	4,812
Pigs,	5,147	24	434	5,892

There are no private slaughter-houses within the City.

Merchandise Marks Act, 1926, and Agricultural Produce (Grading and Marking) Act, 1928, Etc.

The Orders made under the Merchandise Marks Act, 1926, require certain foreign food products to be clearly marked denoting their country of origin, and to this end 666 inspections were made.

Tomatoes and Imported Meat are the most prolific sources of annoyance, being frequently non or inefficiently designated. The contraventions usually are of a trivial nature, and are rectified immediately upon notification.

Apropos of Imported Meat, several cases of improper ticketing came to our notice. Mention, however, might be made in connection with these incidents that there was no attempt at defrauding the public as the price attached to the meat was sufficiently low to indicate that the beef was not "Home Fed." Relative to the marking of eggs, a sample of this commodity was purchased with a view to ascertaining whether or not any tampering had been done to the marking. The Ultra-Violet Lamp was applied but failed to reveal anything of a suspicious nature.

One of the largest firms engaged in the milk trade in Dundee was greatly perturbed by small traders filling and making use of the Company's bottles, and although they had inserted advertisements in the local press intimating that any unauthorised person filling or using bottles belonging to them would be proceeded against, the practice continued.

Reports of contraventions were conveyed to this Department and our aid invoked. Appropriate steps were taken for dealing with the offenders, and in one instance it was necessary, following the sanction of the Board of Trade, to report the circumstances, in terms of Section 2 (1) (d) and (2) of the Merchandise Marks Act, 1887, for applying a false trade description to the goods sold, to the Procurator Fiscal.

The excuse tendered by accused was that other people were using her cans and she thought she was doing no harm. An appearance before the Sheriff, who contended that a contravention had been committed, coupled with a fine of 30/- showed the party the error of her ways.

While on the subject of prosecutions, let it be known that prosecutions are, like many last resorts, not always pleasant, but if cautions and warnings are to be ignored, then the Sanitary Inspector is forced to resort to law by the actions of those whom he tries to help.

The premises of the Dundee Ice and Cold Storage Co., Ltd., situated in Trades Lane, are the only premises within this area registered in terms of Art. 4 (1) of the 1928 Act, and Art. 7, Agricultural Produce (Grading and Marking) Eggs (Scotland) Regulations, 1929.

The Public Health (Preservatives, Etc., in Food) Regulations (Scotland) 1925 to 1927.

SAUSAGES (including Lorne Sausage).—25 samples (19 Official and 6 Test) were purchased during 1936. Analysis showed 2 Official and 1 Test to contain added preservative (sulphur dioxide) greatly in excess of the permissible amount. The test sample was followed up by an official sample which also proved adulterated. A fine of 30/- was imposed at the court proceedings which ensued. The other seller received what is hoped to prove a salutary warning.

MINCE.—In all, 27 samples of this foodstuff were procured. 22 Official and 5 Test). The analyst reported 8 (6 official and 2 test) to be adulterated in a manner similar to the sausages. The two test samples caused the sellers to be sampled "officially," and the purchases again turned out to be likewise. Both vendors were prosecuted and fines of 30/- were imposed in each instance. In the remaining cases, all prosecuted, penalties in three instances were 40/- and the fourth had to pay 80/- for his lack of heed to the instructions issued regarding the use of preservatives. There is no excuse for the continuance of these irregularities; each and all of the butchers know very well what is required of them, and if they are in any way uncertain on any point—they have the remedy in their own hands—a question to any of the Food Inspectors will soon enlighten them.

Food and Drugs (Adulteration) Act, 1928.

Undernoted I give a statement of the number of samples purchased under these Acts during the last ten years :—

		Certified to be		
		Purchased.	Genuine.	Adulterated
1927	...	675	640	35
1928	...	669	637	32
1929	...	674	630	44
1930	...	635	600	35
1931	...	654	618	36
1932	...	637	606	31
1933	...	638	611	27
1934	...	603	583	20
1935	...	632	607	25
1936	...	628	598	30

SYNOPSIS OF THE SAMPLES PURCHASED THIS YEAR :—

I.—Samples taken in the ordinary course, with a view of following up by prosecution, if necessary, should adulteration be discovered.

				Certified to be		
				Purchased.	Genuine.	Adulterated.
Sweet Milk	...	...	...	180	171	9
Do.	(Pasteurised)	...	...	4	4	—
Do.	(Sterilised)	...	...	6	6	—
Do.	(Certified)	...	...	9	9	—
Do.	(Grade A.T.T.)	...	...	2	2	—
Margarine	...	...	...	6	6	—
Coffee	...	...	...	8	8	—
Whole Rice	...	...	...	8	8	—
Ground Rice	...	...	...	4	4	—
Ground Cinnamon	...	...	...	2	2	—
Lard	...	...	...	1	1	—
Sausages	...	...	...	16	14	2
Lorne Sausage	...	...	...	3	3	—
Confectionery	...	...	...	1	1	—
Mince	...	...	...	22	16	6
Pepper	...	...	...	11	11	—
Cream of Tartar	...	...	...	10	8	2
Ground Ginger	...	...	...	6	6	—
Tapioca	...	...	...	1	1	—
Butter (Salt or Fresh)	...	...	...	12	12	—
Jams	...	...	...	2	2	—
Beef Suet	...	...	...	1	1	—
Total				315	296	19

II.—The following samples were taken in terms of Section 8 (1) (c) of the 1928 Act :—

	Taken	Genuine	Adulterated
Sweet or Fresh Butter	6	6	0

III.—The undernoted “ test ” samples were purchased or taken :—

	Purchased or Taken	Certified to be Genuine	Adulterated
Sweet Milk	21	21	—
Do. (Grade A T.T.) ...	4	4	—
Demerara Sugar	1	1	—
Veal, Ham and Tongue Roll	1	1	—
Cream (Tinned),	3	3	—
Milk (Tinned)	18	18	—
Tapioca	6	6	—
Margarine	23	23	—
Coffee and Coffee Essence ...	7	7	—
Whole Rice	12	12	—
Ground Cinnamon	6	6	—
Corn Flour	2	2	—
Sago	4	4	—
Vinegar	1	1	—
Pepper	24	24	—
Pot Barley	9	9	—
Cream of Tartar	18	18	—
Ground Ginger	11	11	—
Baking Soda	4	4	—
Ground Rice	10	10	—
Flour	7	7	—
Oatmeal	6	6	—
Butter (Salt and Fresh) ...	16	16	—
Lard, Dripping, etc.	3	3	—
Sauce	4	4	—
Fish (Tinned)	3	3	—
Mince	5	3	2
Sausages	5	4	1
Do. Lorne	1	1	—
Honey	1	1	—
Meat Paste, etc.,	5	5	—
Tinned Fruit Salad in Jelly ...	1	1	—
Lemon Curd	2	2	—
Tomatoes, etc. (Tinned)	7	1	6
Cocoa	1	1	—
Custard Powder	1	1	—
Mustard	2	2	—
Jam	2	2	—
Cheese	5	5	—
Semolina	1	1	—
Black Currant Cordial	1	1	—
Olive Oil	4	4	—
Tinned Peas	1	1	—

	Purchased or Taken	Certified to be Genuine	Adulterated
Castor Oil	2	2	—
Lemon and Barley Water ...	1	1	—
Table Jelly	2	2	—
Tinned Sild	5	3	2
Tinned Sardines	8	8	—
Tinned Bristling	4	4	—
Welsh Rabbit	1	1	—
Tinned Fruit	2	2	—
Camphorated Oil	2	2	—
Pork and Beans	1	1	—
Corned Beef	1	1	—
Herring Roe	1	1	—
Fish Paste	3	3	—
Pharmaceutical Preparations, etc	5	5	—
Total	307	296	11
Add Table I.	315	296	19
Add Table II.	6	6	—
Total	628	598	30

With a population of 178,692, this works out to 3.51 samples for every 1,000 persons, as against 3.54 last year.

The average milk fat of the samples taken each month (other than those taken at Institutions) was as follows:—

	No. of Samples Purchased.	Average Fat.
January	16	3.37
February	14	3.74
March	24	3.46
April	16	3.44
May	17	3.67
June	17	3.56
July	17	3.75
August	14	4.15
September	16	3.59
October	16	3.72
November	18	3.70
December	16	3.61
	201	3.64

The lowest milk fat recorded this year in official samples was 2.49 per cent. and the highest 8.08 per cent. The number of samples with milk fat below 3 per cent. was 7, and the number of samples with milk fat of 4 per cent. and over was 31.

Test samples of milk as supplied to King's Cross Hospital, the Infant Hospital and Ashludie Sanatorium were submitted on 28 occasions, and the results as declared by the City Analyst were as follows :—

King's Cross Hospital :—

19 Samples of Sweet Milk averaged 4.00 per cent. of fat.

The highest fat content was 4.60 per cent. and the lowest 3.44 per cent.

Infant Hospital, Broughty Ferry :—

4 Samples of Grade "A" T.T. Milk were tested and reported to have an average fat content of 4.16 per cent.

Ashludie Sanatorium :—

1 Sample of Grade "A" T.T. Milk contained 3.71 per cent. of Butter Fat.

Milk.—Nine official samples were under the required standards as far as Fat or Non-Fatty Solids were concerned. In each case **warnings**, in view of the deficiencies not being excessive, were considered to be sufficient in the manner of dealing with these cases. In one instance a composite sample was taken and the average analysis showed a higher figure than that demanded by law. The offending dairyman was recommended to thoroughly mix all milk before offering same for sale. He was also advised to dispose of the cows whose milk fell below the standard.

Cream of Tartar.—Two samples taken under the category ' Official ' were returned as containing Sodium bi-carbonate and tartaric acid respectively. In the first instance a warning was issued and the remaining stock (roughly about 1 lb.) was given into the possession of the Food Sampling Officer. In the second case a prosecution was instituted and a fine of 30s was imposed.

Tinned Tomatoes.—Seven test samples of the foregoing were purchased. In six instances the presence of copper was detected. In the case of 4 samples the copper content was not looked upon as added copper but a natural copper peculiar to the tomatoes produced in the country of origin. In view of this fact and that the amount was minute, permission to continue selling (which was held up pending investigation) was granted. In the other two cases (apart from copper content being decided, the tins were blown and the contents fermented) the stock held by the merchant was destroyed.

Sild.—Two samples of these variety of fish were found to contain an excess of Tin. They were both test samples and on the result of the analysis being brought to the notice of the sellers both returned their stock to the wholesalers. While on this subject, mention might be made that the Department sent a circular letter to all sellers of tinned fish of this and the sardine order within the town, drawing their attention to the fact that, following a conference of Port Medical Officers of Health held at the Ministry of Health, in the near future, the presence of lead in tinned sardines would not be tolerated.

Details concerning the samples of sausages and mince, shown in Tables (I.) and (III.) as being adulterated, will be found in the part of this report headed "The Public Health (Preservatives, Etc., in Food) Regulations (Scotland), 1925 to 1927."

Margarine, Etc.—269 inspections were made to the various shops or premises in the City where Margarine, Margarine Cheese, or Milk Blended Butter are offered for sale.

Wholesale Dealers.—At the end of the year the premises registered where the business of a Wholesale Dealer in Margarine, Margarine Cheese, or Milk Blended Butter is carried on, numbered 32.

Re-Worked Butter.—Five factories—all duly registered—where by way of trade, butter is blended or re-worked, were found to be suitable and satisfactory. Six official samples of re-worked butter were procured during the year, all of which were returned by the City Analyst as genuine.

Milk for Bacteriological Examination.

Samples were purchased or taken for Bacteriological examination as follows :—

Sweet Milk	.....	48
„	(Pasteurised)	14
„	(Grade A. T.T.)	6
„	(Certified)	9

77

These were submitted to Prof. W. J. Tulloch at the University College, the duly appointed Bacteriologist.

The result of the examinations will be found fully dealt with by the Medical Officer of Health in his Report for the year.

Rag Flock Acts, 1911-1928.

The above Acts limit the quantity of Chlorine to 30 parts per 100,000 parts flock and to satisfy ourselves that this limit was being adhered to SIX samples of this commodity were obtained from the premises of upholsterers and bedding manufacturers.

The analysis of these samples revealed:—

- One sample to contain 10.00 parts.
- One sample to contain 8.33 parts.
- One sample to contain 6.66 parts.
- One sample to contain 18.93 parts.
- One sample to contain 3.30 parts.
- One sample to contain 5.00 parts.

thereby showing them all to be well within the demands of the Acts.

Mr Andrew Dargie, B.Sc., A.I.C., Public Analyst, kindly supplies the following interesting figures and particulars:—

“During the year 628 samples were submitted for examination, of which 30 were found to be adulterated, deficient or otherwise not conforming to the prescribed standards and limits. The articles not genuine are as follows:—

Cream of Tartar,	2
Mince,	8
Sausages,	3
Silds,	2
Tomatoes,	6
Sweet Milks,	9
	<hr/>
	30
	<hr/>

Milk Supply.—The average composition of the milk supply as deduced from analyses of samples taken under the act was as follows:—

Water,	87.62
Total Solids,	12.38
Fat,	3.64
Non-Fatty Solids,	8.74
	<hr/>
	100.00

Both butter fat and non-fatty solids are identical with the figures for previous year and show that the quality of the milk is of a high standard. The distribution frequencies are given in Table I.

TABLE I.

Butter Fat per cent.	Frequencies.	Non-Fatty Solids per cent.	Frequencies.
Below 2.70	4	Below 8.00	1
2.70—2.79	—	8.00—8.09	—
2.80—2.89	2	8.10—8.19	1
2.90—2.99	1	8.20—8.29	—
3.00—3.09	8	8.30—8.39	1
3.10—3.19	11	8.40—8.49	1
3.20—3.29	13	8.50—8.59	51
3.30—3.39	17	8.60—8.69	38
3.40—3.49	25	8.70—8.79	38
3.50—3.59	20	8.80—8.89	33
3.60—3.69	25	8.90—8.99	33
3.70—3.79	20	9.00—9.09	16
3.80—3.89	22	9.10—9.19	11
3.90—3.99	14	9.20—9.29	2
4.00—4.09	12		
4.10—4.19	9		226
4.20—4.29	9		
4.30—4.39	2		
4.40—4.49	2		
4.50—4.59	3		
4.60 and over	7		

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Where Sweet Milk contains less than 3.00 per cent. of butter fat or less than 8.50 per cent. of non-fatty solids, it is presumed to be not genuine. Five of these samples were below the presumptive limit for butter fat and two contained less than the minimum amount of non-fatty solids; two were deficient in both butter fat and non-fatty solids.

The lowest butter fat was 2.49 per cent. which is equivalent to a deficiency of 17 per cent. Four samples contained over 5.00 per cent. of fat and one of these was as high as 8.08 per cent., but it is doubtful if this is a representative sample of the milk as sold. It suggests that the milk was not mixed before sale.

Butter and Margarine.—34 samples of butter and 29 of margarine were submitted for analysis. All these were genuine and conformed to the Preservatives in Foods Regulations. In the butters the amount of water ranged from 12.46 to 15.92 per cent., the average being 14.44, and the limits for margarine were 10.05 and 15.83 per cent., with an average of 13.88 per cent. The maximum permitted is 16.00 per cent. The distribution frequencies were as follows:—

TABLE II.

Water, per cent.	Butter	Margarine
10.00—10.99	—	2
11.00—11.99	—	3
12.00—12.99	3	2
13.00—13.99	6	5
14.00—14.99	15	10
15.00—15.99	10	7
	<hr/> 34 <hr/>	<hr/> 29 <hr/>

Mince and Sausages.—27 samples of Mince and 25 of Sausages were examined under the Preservatives, Etc., in Food Regulations. Eight samples of Mince contained sulphur dioxide either in excess of the amount permitted during the summer months or in having preservative present during the months October to May when it is not permitted. Three sausages contained more than 450 parts sulphur dioxide per million parts of sample, the highest being 691. In the mince, three contained over 1000 parts and one was as high as 2669 parts per million, which is ridiculously high. The eleven samples were reported as contraventions. Table 3 gives the distribution frequencies.

Sulphur Dioxide in Parts per Million	Mince	Sausages
Absent	15	—
Up to 99 parts	1	7
100—199 parts	2	7
200—299 parts	3	6
300—399 parts	—	1
400—450 parts	—	1
451—499 parts	—	—
500—599 parts	—	1
600—699 parts	—	2
700 and over	6	—
	<hr/> 27 <hr/>	<hr/> 25 <hr/>

Spices.—35 White Pepper, 17 Ground Ginger, 8 Ground Cinnamon and 2 Mustard. The percentage of ash was normal and the spices were almost free from silicious matter. The average percentages of ash were as follows :—White Pepper, 0.82% ; Ginger, 4.15% ; and Cinnamon, 4.30%. The Ground Ginger conformed to the Preservatives Regulations.

Condensed Milk.—3 Sweetened Condensed Milk Full Cream and 15 Sweetened Condensed Skimmed Milk were examined. The full cream samples contained over 9.00 per cent. of butter fat and over 31.00 per cent. of Total Milk Solids. The Total Milk Solids in the Skimmed Condensed Milks ranged from a minimum of 26.21% to a maximum of 28.54%, and the butter fat from 0.22 to 0.73%. All these samples conformed to the Condensed Milk Regulations.

Whole Rice 20, Ground Rice 14, Pot Barley 9.—These articles were examined specially for Talc facing. The Pot Barley samples were free from Talc and the maximum found in the Whole Rice was 0.48 per cent., which approaches the provisional maximum of 0.50 per cent. Eight of the Whole Rice were free from Talc facing, and there was no evidence of extraneous matter in the Ground Rice.

Cream of Tartar.—28 samples were examined and with two exceptions were found to be of high-class quality being over 99.0 per cent. purity. One sample contained 1.56 per cent. of Cream of Tartar and 98.44 per cent. of Tartaric Acid and the second sample contained 97.17 per cent. of Cream of Tartar and 2.83 per cent. of Sodium Bicarbonate. These two were reported as contraventions of the Food and Drugs (Adulteration) Act.

Oils.—Olive Oil 4, Castor Oil 2, Camphorated Oil 2, Eucalyptus Oil 1. All these Oils conformed to the B.P. Tests.

Jams and Jellies 4.—The soluble solids were over 68.50 per cent. and the Jams conformed to the Full Fruit Standards. They also conformed to the Preservatives Regulations.

Farinaceous Foods.—Tapioca 7, Sago 4, Corn Flour 2, Flour 7, Oatmeal 6, Semolina 1, Custard Powder 1. One sample purchased as Sago was found to consist entirely of Tapioca, but frequently these are taken as synonymous terms and the sample was reported genuine. The other articles mentioned above were of normal composition and were reported as genuine.

Tinned Foods.—These foods were specially examined for poisonous metals and were found to contain Tin in the proportions stated below.

Sardines.—Grains per lb. of Tin—0.30, 0.48, 0.69, 0.69, 0.35, 0.69, 0.65, 0.46. (8.)

Bristlings.—0.22, 0.35, 1.43 and 0.30. (4.)

Sild.—Trace, trace, 1.48, 5.94 and 4.45. (5.)

1 Herring—0.18. 1 Salmon—0.40. 1 Beans with Pork—0.54. 1 Herring Roe—no metals. 1 Fresh Crab—no metals. 1 Green Peas—no metals. 1 Prunes—0.67.

There is an arbitrary maximum limit of 2 grains of Tin per lb. for tinned articles of food, so that the Silts containing 5.94 and 4.45 grains of Tin per lb. were reported as contraventions.

7 Tinned Tomatoes were found to contain Tin and Copper in the proportions stated below :—

0.41 grains Tin per lb. and 25 parts Copper per million parts sample.							
0.48	Do.	Do.	16	Do.	Do.	Do.	Do.
0.70	Do.	Do.	18	Do.	Do.	Do.	Do.
0.74	Do.	Do.	16.8	Do.	Do.	Do.	Do.
1.32	Do.	Do.	40.0	Do.	Do.	Do.	Do.
1.31	Do.	Do.	66.0	Do.	Do.	Do.	Do.
0.65	Do.	Do.	—	Do.	Do.	Do.	Do.

The amounts of Tin found conformed to the arbitrary limit of 2 grains per lb., but the six samples which contained copper were reported as not genuine.

Miscellaneous Articles.—1½ Coffee, 1 Coffee and Chicory Essence, 1 Cocoa, 5 Cheese, 2 Lard, 1 Dripping, 1 Suet, 1 Spry, 3 Cream, 4 Sauces, 2 Table Jellies, 2 Lemon Curd, 2 Syrup of Figs, 1 Glycerine, Lemon and Ipecac., 1 Glycerine, Lemon and Honey, 1 Lemon and Barley Water, 1 Pineapple, 1 Fruit Salad in Jelly, 1 Corned Beef, 1 Veal, Ham and Tongue, 1 Malt Vinegar, 1 Demerara Sugar, 1 Welsh Rabbit, 1 Honey.

All these samples were found to be genuine and free from adulterations.

Rag Flock Acts.—Six Rag Flock were examined and found to contain soluble chlorides, expressed as Chlorine in the following amounts:—18.93, 3.30, 5.00, 10.0, 6.66 and 8.33 parts per 100,000. These conform to the standard laid down by the Rag Flock Acts, 1911 and 1928.

Clensels. Poisons Rules, 1935.—Six Clensels were submitted for analysis under the Third Schedule Group II. of the Poisons Rules, 1935. There is special exemption for liquids containing less than five per cent. weight in weight of Ammonia (NH_3). The percentages of Ammonia in the samples were 0.92, 0.83, 0.80, 0.84, 0.85 and 0.82, which in each case conforms to the condition laid down in the Section.

Merchandise Marks Act—6 North Country Eggs.—The eggs were examined under the Ultra Violet Lamp for signs of Imperial or Foreign Markings or for abrasions. On one egg there was a slight abrasion, but distinctive markings were absent and their origin could not be determined. The eggs were fresh and had a normal air space.

Wonder Bleach.—This sample contained 1.92% Total Available Chlorine."

Fertilisers and Feeding Stuffs Act, 1926.

As a result of the revisal of the terms of appointment the duties of the Veterinary Inspector, so far as sampling under the Act and Regulations of 1932 is concerned, were transferred to this Department. It was necessary for the new appointments to be confirmed by the Department of Agriculture for Scotland, and as this had not materialised by the end of the year no samples of Feeding Stuffs or Fertilisers were obtained for analysis.

Pharmacy and Poisons Act, 1933

The administration of the above Act and the rules thereunder was transferred to this Department during the year.

It will be readily understood that the law pertaining to the sale of poisons is both diverse and complicated when it is known that there have already been published by the Government four somewhat lengthy memorandums in an effort to explain in a more lucid manner the requirements of the Act and governing rules.

At the end of the year on our Register there were 126 listed sellers permitted to deal in what are understood as Part II. Poisons, among which is included the common household cleaner—ammonia.

Seven samples—6 clensel and 1 liquid bleach were obtained and on analysis were shown to be exempt from the terms of the Act.

Shops Acts, 1912/1934.

A comprehensive survey of all shops, wholesale and retail, within the Burgh was undertaken by the Department and a report thereon submitted to the Local Authority, in the following terms.

“It will be observed that there are 3,663 retail shops—of which 76 are presently unoccupied, and 169 wholesale premises, warehouses and garages—a total of 3,832 businesses to which the provisions of the Act apply, in whole or in part.

In the occupied premises numbering 3,756 there are employed:—

1,284	young persons between the ages of 14 and 16 years;
996	young persons between the ages of 16 and 18 years; and
7,203	persons over the age of 18 years; a total of
<hr/>	
9,483	persons.

The Water Closet Accommodation provided is as follows:—

1,244	shops have each a water closet, or water closets installed inside;
192	shops have each a water closet situated outside for the sole use of the employees;
613	shops have each the use of a water closet situated outside, common to two tenants;
472	shops have each the use of a water closet situated outside, common to three tenants;
422	shops have each the use of a water closet situated outside, common to four tenants;
177	shops have each the use of a water closet situated outside, common to five tenants;
142	shops have each the use of a water closet situated outside, common to 6 or more tenants;
494	shops are reported as having no water closet accommodation.

It should be noted that in many instances the water closets reported as used in common by two or more tenants, relates to conveniences allocated for the combined use of shopkeepers and occupiers of dwelling-houses.

Suitability of Washing Facilities.

- 3,583 shops have suitable facilities for the use of employees;
173 shops either have unsuitable facilities, or none are available.

3,756

Ventilation of Shops.

- 3,739 shops are satisfactorily ventilated, while
17 shops are unsatisfactory.

3,756

Lighting Arrangements.

- 3,736 shops are efficiently lighted;
20 shops are inefficiently lit.

3,756

Heating Arrangements.

- 3,521 shops are provided with suitable arrangements;
235 shops are not so provided.

3,756

Facilities for Taking Meals Where Such Are Required.

- 1,795 shops have satisfactory arrangements;
13 shops are not satisfactory.

1,808

Seats for Female, Where Such are Required.

- 1,860 shops have made satisfactory provision;
8 shops lack these facilities.

1,868

The fixing of hard and fast standards for sanitary and other arrangements relating to the health and comfort of shop workers is definitely impracticable.

The inspection of shops to determine whether or not they can be classified as being in conformity with the Act of 1934 is now proceeding, and where it is deemed advisable to grant exemption certificates, reports giving a description of the present facilities and accommodation will be prepared and submitted by the Chief Inspector to the Committee for their consideration, who would adjudicate each case and grant or refuse certificates."

As will be observed from the Report, the retail shops within the City totalled in all 3,663, and to these premises 7,914 visits were paid. Street patrol—when the necessity arose—was carried out during the year, in all 69½ hours being thus spent.

Contraventions numbering 521 were discovered—mostly of a trivial nature. It is in the small shops carrying varied stocks that most of the trouble arises, the diversity of the wares calling for different "closing times," and the traders omitting to comply with the statutory needs regarding displaying notices and covering goods.

In 15 instances prosecutions were instituted for contraventions relevant to the Shops Acts, 1912/1928, and Orders thereunder.

Frequently the offenders excuse themselves on the ground that nearby shopkeepers are similarly breaking the law, but it is useless to attempt to justify their own actions by citing the shortcomings of others—emulating other law-breakers in no way mitigates their own deeds.

The 15 cases which were reported to the Procurator Fiscal were dealt with as follows:—

Shops (Hours of Closings) Act, 1928.—11 cases—1 admonished. The remaining ten were fined as follows:—3 at 10/-; 5 at 15/-; 1 at 20/-; and 1 at 30/-.

Shops Acts and Closing Orders made thereunder:—4 cases. Fines imposed—1 of 10/-; 1 of 15/-; 1 of 20/-; and one offender fined 15/- for two offences, i.e., 10/- and 5/-.

Two prosecutions were instituted under the 1934 Act. The first case was that of a firm owning many shops in the City and other towns throughout Scotland. They were charged with employing young persons from 9 a.m. till 1 a.m. the following morning;

failing to allow an interval of 11 consecutive hours to certain of their employees; failing to keep records in connection with the employment of two lads, and failing to keep true and accurate records regarding the employment of one boy.

This firm had been repeatedly warned for infringements of the Shops Acts, and their continued lack of heed to cautions resulted in the above Court case. In the first three instances a fine of £2 was imposed, and for the last, regarding which the Sheriff made severe strictures, a penalty of £3 was imposed, £9 in all.

Another prosecution under this Act took place. This time for employing a young boy before 6 a.m. and failing to keep records. £3 was imposed.

In last year's report it was mentioned that the coal traders in the city had been successful in their petition for an early closing order, which along with a half-holiday order, is now in operation. In addition to supervising our local firms, we are also faced with the responsibility of preventing contraventions by traders from out-with the Burgh who retail from off lorries on streets.

The Shops Act of 1936, which comes into effect on 1st January, 1937, brings the business of lending libraries into line with other shops. This will do much to relieve a situation which was rather anomalous.

Places for Public Refreshment, numbering 254, were regularly inspected. They were found generally to be in keeping with the Bye-Laws governing such places. One contravention—remaining open after the stipulated hours—was reported to us by the police, and we in turn took the necessary steps for Police Court proceedings. A fine of 15/- was levied.

The Dundee Corporation Order, 1935, places in our hands authority which has for a long time been lacking. By the terms of the Order no person shall be permitted to carry on the business of manufacturing, vending or dealing in Ice Cream unless registration by the Local Authority is granted. Of recent times the value of Ice Cream as a food has been greatly lauded, and each year sees an increasing quantity consumed. We thus gladly welcome these new powers, and will be able to put the trade on the footing we have long desired and also be in a position to say "yes" or "no" to some of the "back shop" manufacturing of this commodity.

Theatres, Cinemas and Dance Halls.

Speculation was rife when the cinema was in its inceptive stage. It was regarded as a caprice and predicted to enjoy the usual lifetime of such. Few predictions have been so completely contradicted by results; not only has the cinema flourished, but playgoers have seen with dismay many theatres converted into picture houses.

In Dundee there are 29 Cinemas providing seating for 31,046 persons, and able to accommodate a further 1,345 when "Standing Room Only" is displayed.

Of theatres we have three—one of which is in use more as a cinema, but on occasions treats us to "legitimate drama"—an indulgence Dundonians get only too rarely. These premises can seat 2,675 persons, and have standing space to accommodate 200.

There are also to be mentioned the Caird Halls (three in number) capable of seating 3,871 and another Cinema, with accommodation for 580 persons, presently derelict after a fire.

183 visits were paid to these buildings to verify that they were being maintained in a cleanly condition.

Previous to being licensed a report on the ventilation and sanitary accommodation is furnished by this Department, and any premises not conforming to standard is refused license until such time as they are brought into line. Church, etc., halls, where operettas and similar entertainments are presented have to be approved of by the Local Authority, and this Department always furnishes a statement on the suitability or otherwise of the premises, the granting of permission hinging on the terms of the report.

Dance halls, similarly inspected, number 36.

Port Inspection.

1936, a year of records, maintained its reputation so far as the volume of shipping at this Port was concerned. The foreign arrivals totalled 400 ships, an increase of 60 on the figures for the previous year, and coasting traffic was augmented by 29 ships, the number being 749. These combined totals number 1,149 vessels, representing a net tonnage of 1,018,280.

Arrivals from infected foreign ports amounted to 127. Of these, 16 came direct to Dundee and underwent the prescribed measures in terms of the Port Sanitary Regulations (Scotland), 1933. The others had already been similarly dealt with at other British Ports prior to calling at Dundee, but the necessary precautions were also taken here.

The Port Sanitary Officer made 1,078 visits of inspection to ships calling at this Port.

Cargoes.

The cargoes arriving at this Port show little or no variation over previous years. From India—Jute, Gunnies, Cotton, Tea, Desiccated Cocoanut, Linseed, Oilcake and Pig Iron; Mediterranean Ports—Esparto Grass, Phosphates, Pyrites, Cork Shavings, Oil Cake, Cotton Seed, and Bitter Oranges. Baltic and White Sea Ports—Flax, Pulp, Paper, Slates, Matches, Timber and partly manufactured timber articles. Other Continental Ports—Margarine, Butter, Cheese, Sugar, Condensed Milk, Fruit Pulp, Vegetables, Peas, Ground Rice, Glucose, Flower Bulbs, Shrubs, Fruit Trees, Fertilizers, Fancy Goods, Steel and Iron Bars, Electric Cables and Oil. North American Ports—Cheese, Flour, Fruit, Tinned Foods, Pitch, Ochre, Oak and Maple Flooring, Pitch Pine Logs, Wire and Binder Twine. West Indies—Crude Oil and Sugar. Irish Free State—Beet Pulp for cattle feeding.

Nuisances.

There was an increase of 99 in the number of nuisances discovered, the total being 385. Abatement was secured in all cases before the vessels departed. These nuisances and other work done at our instigation will be found in tabular form at the end of this report. Despite the increased number of nuisances there is an improvement to be recorded. This is probably due to so many new ships giving improved facilities and living conditions.

It is satisfactory to state that there were no cases of vermin infested forecastles.

Deratisation.

There were 29 vessels inspected at this Port in terms of Article 28, International Sanitary Convention, and Article 19, Port Sanitary Regulations (Scotland), 1933. In all cases the vessels were found to be reasonably free from rat infestation and

Deratisation Exemption Certificates were granted. These certificates are valid for six months, and are accepted throughout the world.

One vessel having a valid Deratisation Certificate was found on inspection to be heavily rat infested. During a stay of one week efforts to clear the ship of rats resulted in 43 being killed. Ashore, the Harbour Trustees continue their intensive action to keep the sheds and warehouses, so far as possible, free from rats, and in this connection a timber floor was removed from one of the sheds and replaced with cement concrete.

The Parrots (Prohibition of Import) Regulations (Scotland), 1930.

There were four occasions involving six birds bringing into operation the above Regulations. In all cases a written declaration was given not to land the birds at this Port.

Total number of Verbal Intimations	389
Total number of Rat Notices issued	11
Number of Visits to Ships	1,078
Number of Ships from Infected or Suspected Ports (direct)	16
Number of Ships from Infected or Suspected Ports (indirect)	111
Number of Ships from Free Ports (direct)	135
Number of Ships from Free Ports (indirect)	138
Total number of Ships from Foreign Ports	400
Nuisances and defects attended to	385
Forecastles Cleaned	52
Messrooms Cleaned	19
Galleys and Store-rooms Cleaned	27
Accumulations of Food Refuse	43
Choked or Defective W.C.'s	41
Dirty W.C.'s	36
Discharge of Foul Water on Quay	43
Ventilators Obstructed	71
Excessive Smoke Emission from Vessels	13
Defective Ports	14
Leaking Deck Plates	7
Rat Refuges Destroyed	19

In addition the following work was carried out while the vessels were in Port :—

Fresh Water Tanks Cleaned Out	43
Forecastles Washed or Painted	46
Bathrooms or Wash-Places Painted	31
Galleys Washed or Painted	39
W.C.'s Painted	52

1. Amount of Shipping entering the Port in 1936 :—

	Number	Tonnage
(1) Foreign,	400	720,672
(2) Coastwise,	749	297,608
	<hr/>	<hr/>
Totals,	1,149	1,018,280

2. No. of Vessels subjected to measures of Rat Destruction in 1936 :—

“ A.”

No. of Vessels subjected to Measures of Rat Destruction ...	8
On Ships*—No. of dead rats recovered	56
No. of rats examined bacteriologically	Nil
No. of rats found infected with Plague	Nil
On Shore*—No. of rats destroyed (other than on ships)	174
No. of rats examined bacteriologically	Nil
No. of rats found infected with Plague	Nil

*Species of rat recovered—Common Grey Rat and 21 Black Rats.

“ B.”

No. of Vessels fumigated by SO ₂	Nil
No. of dead rats recovered	Nil
No. of Vessels fumigated by HCN	Nil
No. of dead rats recovered	Nil
No. of Vessels in which poisoning, etc., was employed	17
No. of dead rats recovered	56
No. of Deratisation Certificates issued	Nil
No. of Deratisation Exemption Certificates issued	29

3. No. of Vessels (included in (2) above) deratised **before discharge of Cargo**

Nil

Section 164 of the Burgh Police (Scotland) Act, 1892.
PROVISION AND RENEWAL OF RAIN WATER SPOUTS AND
DOWNPIPES.

Under the above Section the following work was executed, viz. :—

Number of Properties where the rain water spouts and conductors have been overhauled, renewed or otherwise repaired.	Lineal feet of new rain water conducting channel rhones or gutter pipes used in the renewing or repairing of the same.	Lineal feet of new rain water conducting or downfall pipes used in the same way at the different properties.
430	5,067	2,799

General Prosecutions.

The prosecutions for the year were as under :—

Dundee Extension and Improvement Act, 1892, Sec. 67	Preservatives in Food (Sausages)	(Mince)	Shops Acts, 1912/1934	Food and Drugs (Adulteration) Act (Cream of Tartar.)
1	1	6	17	1
Public Health (Scotland) Act, 1897, Sec. 40	Places of Public Refreshment Bye-Law I.			Merchandise Marks Act, 1887
1	1			1*
	Total			
	29			

*After authority from H.M. Board of Trade.

Detailed particulars of each are given under the various heads.

I am, Gentlemen,

Your Obedient Servant,

ALEX. A. RUSSELL,
Chief Sanitary Inspector.

